

Model TC-131 Tape Controller Logic Manual



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MODEL TC-131
TAPE CONTROLLER
LOGIC MANUAL

Publication Number:

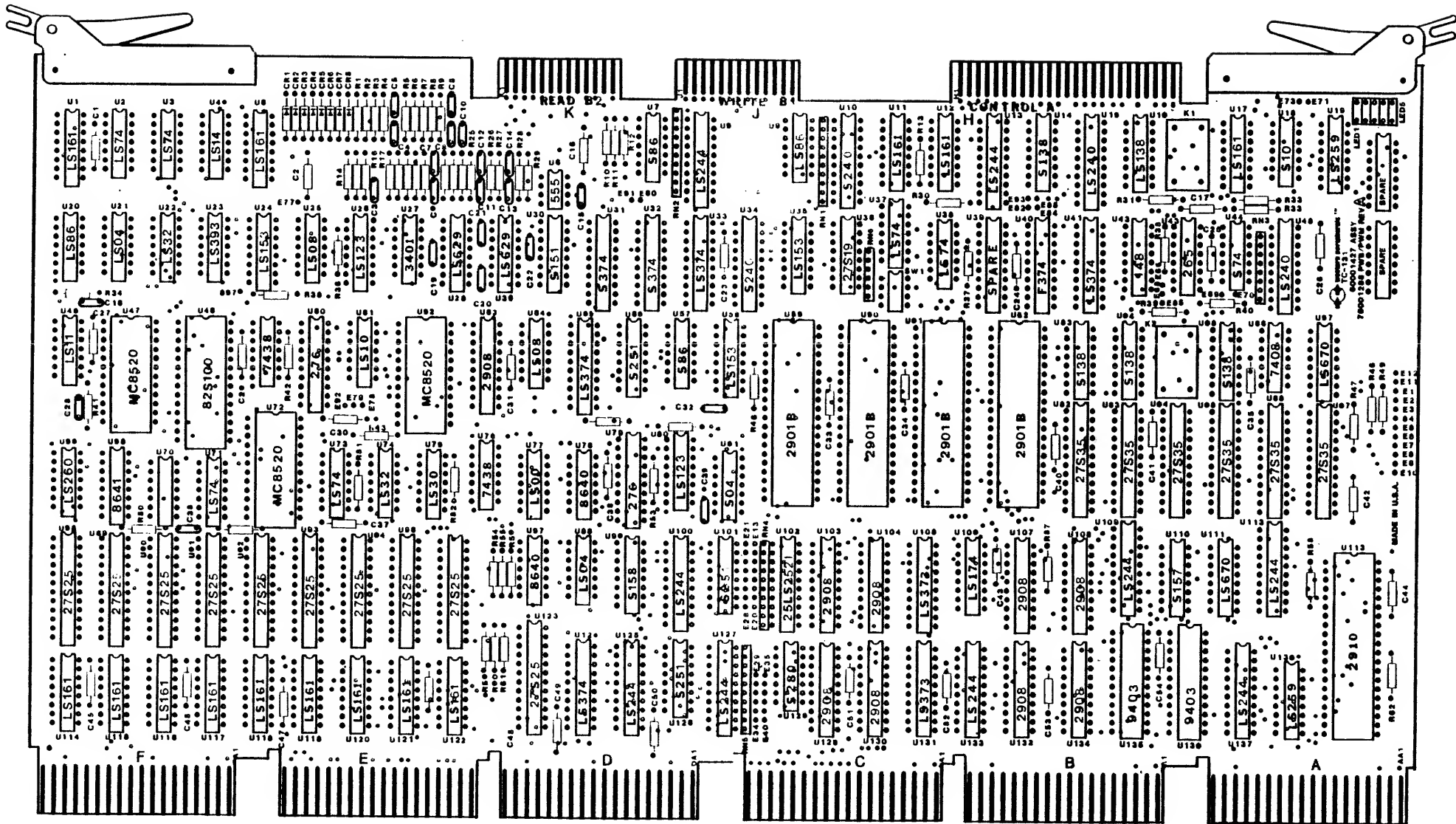
P91000489

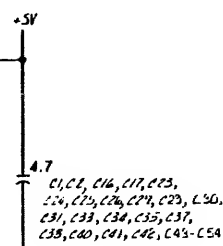
Rev. B

Rev. Date 03/20/85

Applicable Assembly Number: P60001427

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INSTALLATION OF SELECTION OPTION JUMPERS FOR DEC/IBM BACKING MODES AND MULTI/RE DENSITY MODES

WRI/PE DESMITT MODE SELECTION OPTIONS:	DEC/IBM PACKING MODE SELECTION OPTIONS:	TC-131 JUNIPERS REQUIRED:
PE DESMITT MODE SELECTABLE BY SETTING DESMITT SWITCH ON DRIVE (STANDARD)	IBM PACKING MODE SELECTABLE BY SETTING BIT 10 (IBM) IN HWTD REGISTER (STANDARD)	E82 TO E83 E84 TO E85
	IBM PACKING MODE SELECTABLE BY SETTING BIT 10 (SEL. 4) IN HWTC REGISTER (OPTIONAL)	E83 TO E85 E84 TO E85 E86 TO E81
	IBM PACKING MODE ONLY (OPTIONAL)	E82 TO E83 E84 TO E85 E76 TO E79
	IBM PACKING MODE SELECTABLE BY EXTERNAL SWITCH (OPTIONAL)	E82 TO E83 E84 TO E85 WIRE SWITCH FROM E78 TO E7
PE DESMITT MODE SOFTWARE SELECTABLE BY SETTING BIT 10 (SEL. 4) IN HWC REGISTER (OPTIONAL)	IBM PACKING MODE SELECTABLE BY SETTING BIT 10 (IBM) IN HWTD REGISTER (STANDARD)	E83 TO E85 E82 TO E84
	IBM PACKING MODE ONLY (OPTIONAL)	E83 TO E85 E82 TO E84 E78 TO E79
	IBM PACKING MODE SELECTABLE BY EXTERNAL SWITCH (OPTIONAL)	E83 TO E85 E82 TO E84 WIRE SWITCH FROM E78 TO E7

SW POS	12S	12S	12S	12S	7S	7S	7S	4S	4S	32S	SEL B
	7S	4S	32S	2S	4S	32S	2S	32S	2S	2S	SEL A
1	C	C	C	C	C	C	C	0	0	0	
2	C	C	C	C	0	0	0	C	C	0	
3	C	C	0	0	0	0	0	C	0	C	
4	C	0	C	0	0	C	0	0	0	C	

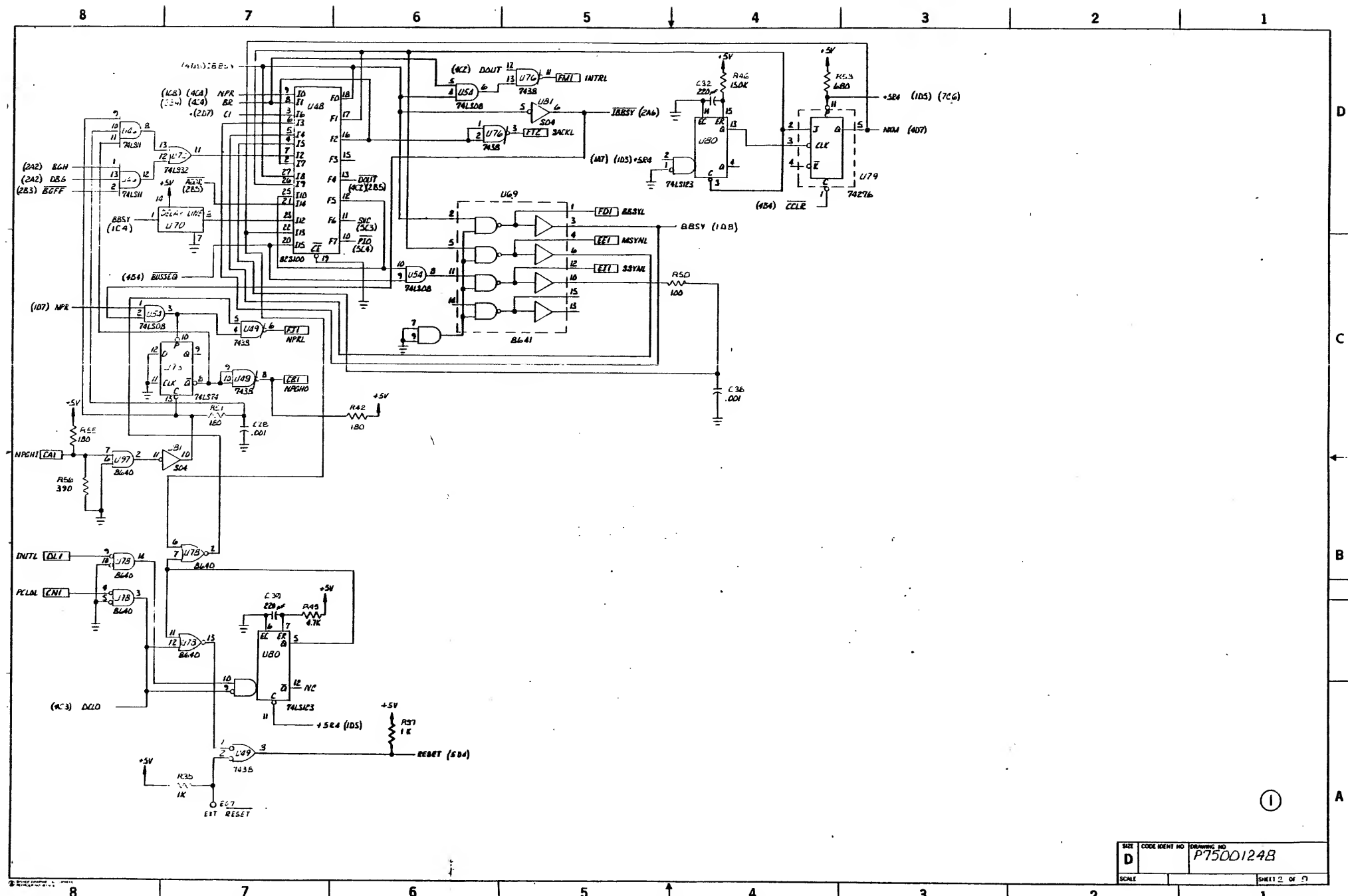
C = ON
O = OFF

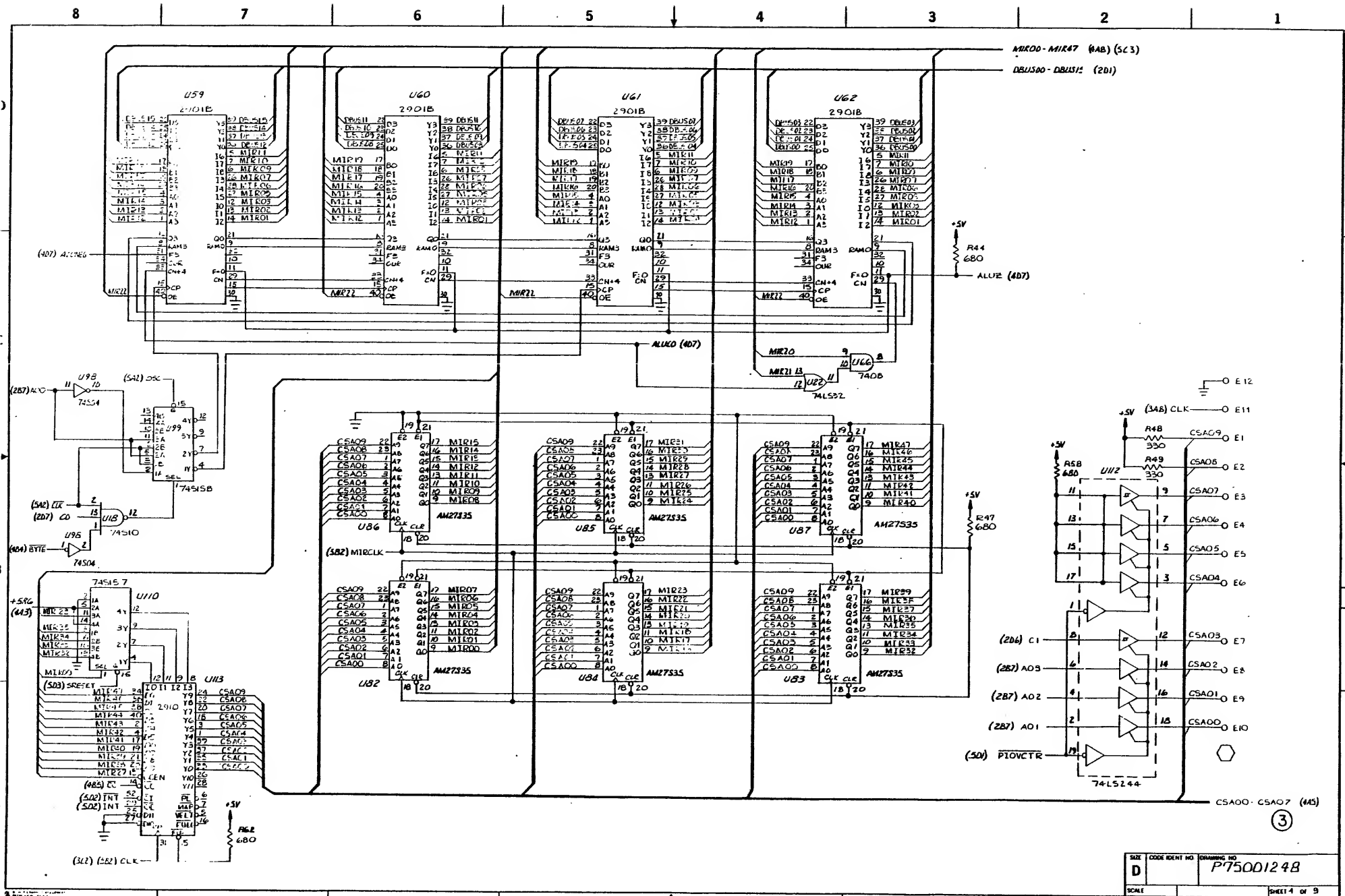
LAST DESIGNATION USED	
RESISTOR	63
CAPACITOR	54
DIODE	8
LED	5
RESISTOR NETWORK	6
OSCILLATOR	2

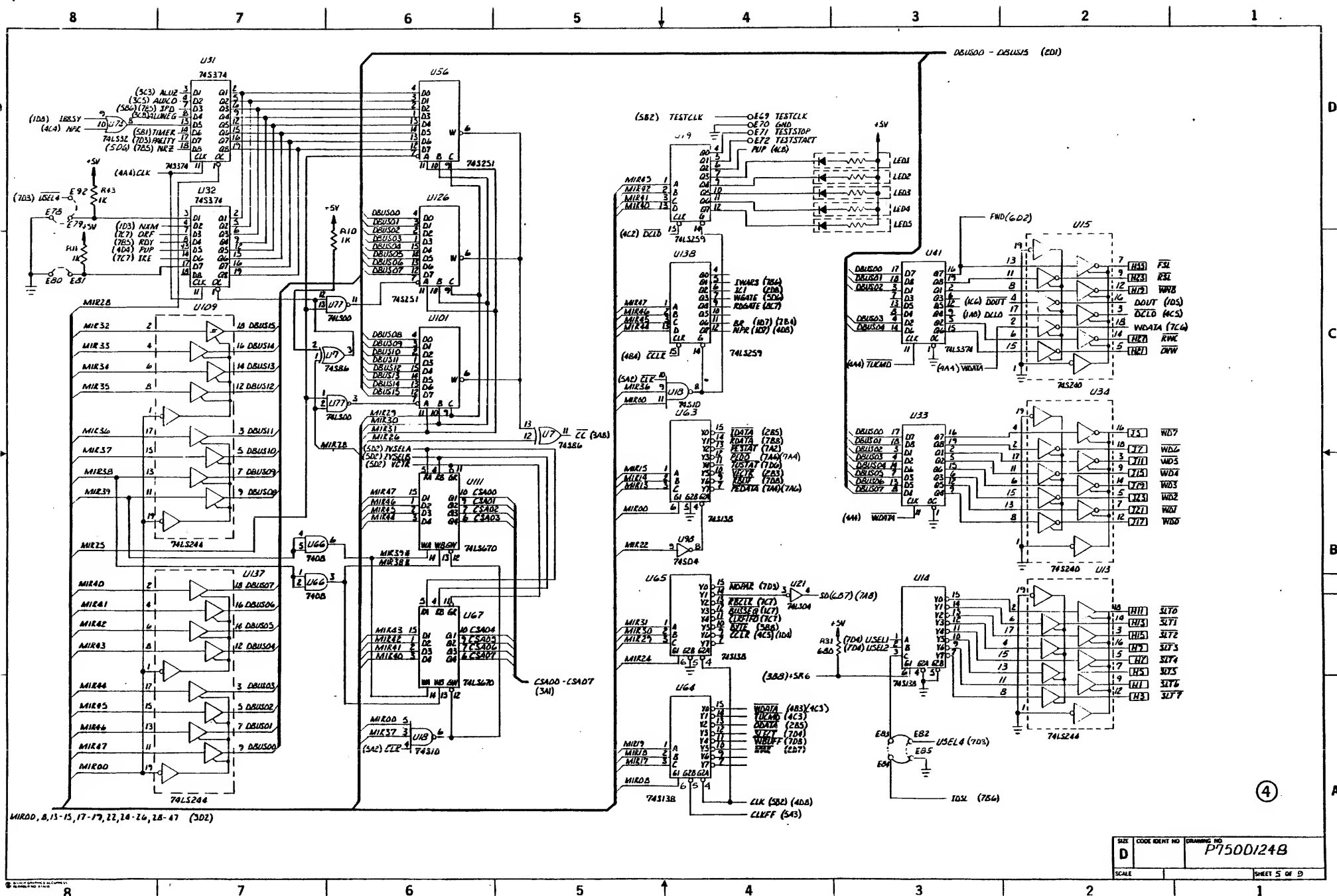
SPARES		
I.C. LOC.	DESCRIPTION	PIN NO.
	864D	9-14
	74LS11	3-6
	74LS32	1-3
	7438	11-13
	74276	
	74S86	11-13

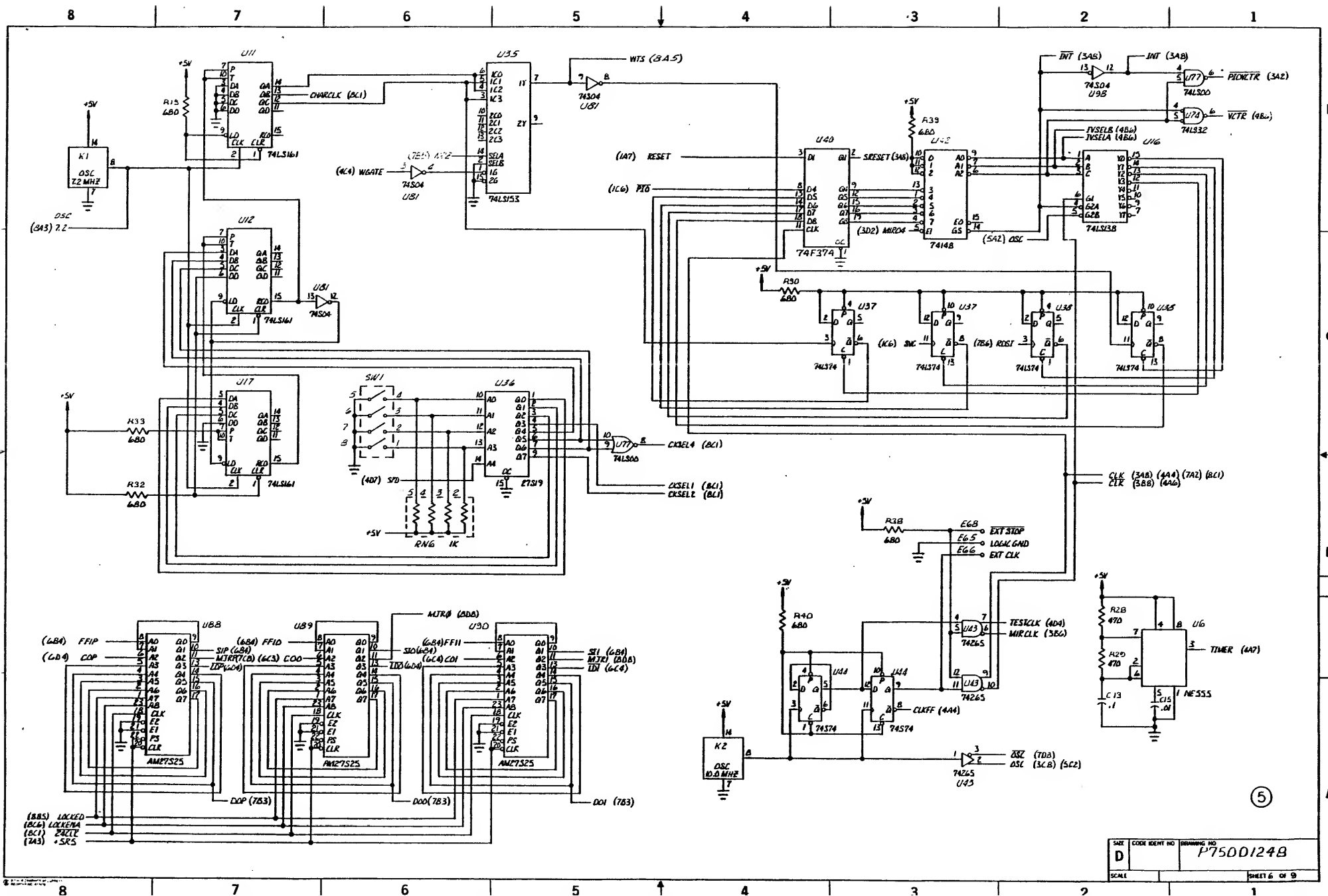
3. REFERENCE ASSY. FL0001427
2. CAPACITOR VALUES ARE IN MICROFARADS.
1. RESISTOR VALUES ARE IN OHMS & ARE 1/4W 5%
NOTES: UNLESS OTHERWISE SPECIFIED.

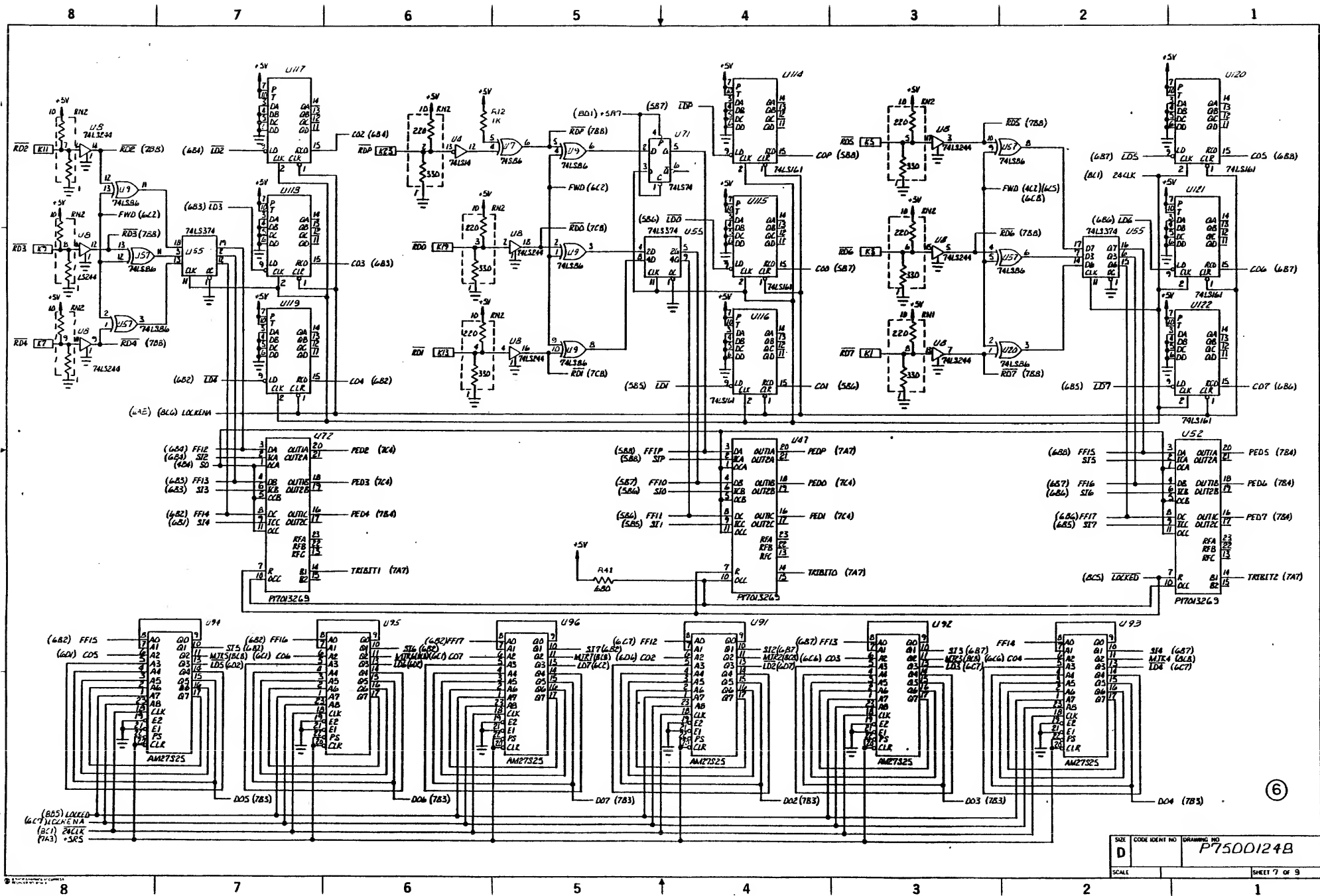
QTY REQD		CODE REQD		PART OR IDENTIFYING NO		NOMINATURE OR DESCRIPTION			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE FRACTIONS DECIMALS ANGLES X.X = X .XX = X°						CONTRACT NO			
MATERIAL						APPROVALS		DATE	
						DRAWN <u>D. KENNEDY</u>		<u>7-26-83</u>	
FINISH						CHECKED <u>W. E</u>		<u>1/1/85</u>	
						ENGR:			
P#0001427						SIZE		CODE IDENT NO	
NEXT ASSY USED ON						D		DRAWING NO	
APPLICATION								175001248	
DO NOT SCALE DRAWING						SCALE		SHEET 1 OF 9	












REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	RELEASE	2-7-85	

TC-131 for Technicare:

This configuration corrects a problem where NPG, BG and NPR are not propagated correctly.

This configuration is to be performed on the following assembly only:

P60001427.

To update the above assembly to this configuration perform the rework as follows:

- A. Label the spare location just below the LED's 1-5 as "S1".
- B. Label the second spare location below the LED's 1-5 as "S2".
- C. Install a 74LS14 I.C. in spare location S1 with pin 1 of I.C. in pin 1 of the printed circuit board.
- D. Install the following components in spare location "S2":


COMPONENT	VALUE	LOCATION
P14000335	270 Resistor	S2-2 to S2-15
P15000102	82 PF Capacitor	S2-3 to S2-14
P14000335	270 Resistor	S2-7 to S2-10
P15000102	82 PF Capacitor	S2-8 to S2-9

- E. Lift pins:

U76-9, U76-10, U49-9, U49-10.

- F. Add Jumpers:

FROM	TO	TO
U73-6	S2-2	
U73-8	S2-7	
S2-3	S2-8	
S2-9	S2-10	S1-13
S2-14	S2-15	S1-1
S1-2	S1-3	
S1-4	U76-9	U76-10
S1-12	S1-11	
S1-10	U49-9	U49-10
S1-7	(S1-8) Pad on P.C.B.	GND

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		 western peripherals™ TUSTIN, CALIFORNIA		
APPROVALS DRAWN <i>G. FRENCH</i> CHECKED <i>R. Ellis</i> ENGB. <i>Z. Funn</i>				DATE 2-7-85 2-7-85 2-7-85
CONFIGURATION "T" TC-131 TECHNICARE		SCALE NONE	SIZE A	DRAWING NO. P79001897
DO NOT SCALE DRAWING			SHEET 1 of 1	

MANUAL REVISION HISTORY

<u>REVISION</u>	<u>DATE</u>	<u>DESCRIPTION</u>
B	03/20/85	BOARD LAYOUT CHANGED PLUS NEW SCHEMATIC REMOVED OBSOLETE DRAWINGS

NOTES

4

APPENDIX A

STANDARD TAPE DRIVE
CABLES AND ADAPTERS

12-16-81

FUNCTIONAL INDEX

I.	RIBBON CABLES AND BACKPLANE CONNECTORS	DRAWING NO.
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	Assembly - Cable, Read	121006
	Assembly - Cable, Write	121014
II.	ADAPTER PADDLEBOARDS	
1.	SCHEMATICS	
	Schematic - Tape Control Adapter	122036
	Schematic - Adapter, Tape Write Connector	122021
	Schematic - Adapter, Tape Read Connector	122022
2.	ASSEMBLY DRAWINGS	
	a. CONTROL	
	Assembly - Adapter, Tape Control Connector (Standard)	122037
	Assembly - Adapter, Tape Control Connector (90° Mount)	122038
	Assembly - Adapter, Tape Control Connector (2-inch Standoff)	122039
	b. WRITE	
	Assembly Drawing - Tape Write Connector (Standard)	122006
	Assembly Drawing - Adapter, Tape Writer (Reverse Image)	122019
	Assembly - Adapter, Tape Write (90° Mount)	122034
	c. READ	
	Assembly Drawing - Adapter, Tape Read Connector	122005
	Assembly Drawing - Adapter, Tape Read (Reverse Image)	122018
	Assembly - Adapter, Tape Read (90° Mount)	122035
	Assembly - Adapter, Tape Read (Reverse Image 90° Mount)	122043
	d. DRIVE SELECT JUMPERS	
	Assembly, Jumper Array, Select Switch Option	122010
	Assembly, Jumper Array, Select Switch Option (4th Drive)	122011
	Assembly, Jumper Array, Non-Select Switch Option	122012
III.	SPECIAL FEATURE MODIFICATIONS	
	Modification Drawing, Tape Control Adapter Configuration "S"	112001
	Modification Drawing - Tape Control Adapter Configuration "N"	122044
	Modification Drawing, Cipher 900X (Config. "A")	79000410
	Modification Drawing, Cipher 900X (Config. "B")	79000642

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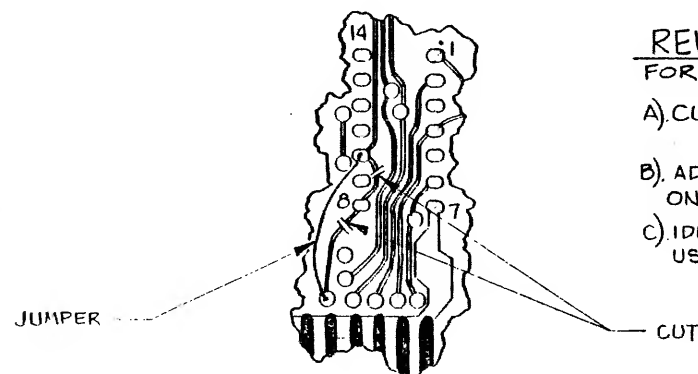
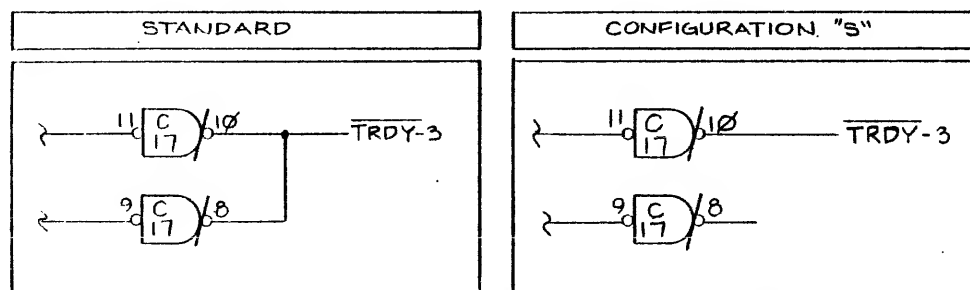
TITLE	DRAWING NO.
Modification Drawing, Tape Control Adapter (Config. "S")	112001
Assembly - Cable, Control	121004
Assembly - Cable, Read	121006
Assembly - Cable, Write	121014
Assembly Drawing - Adapter, Tape Read Connector	122005
Assembly Drawing - Tape Write Connector	122006
Assembly, Jumper Array, Select Switch Option	122010
Assembly, Jumper Array, Select Switch Option, Special	122011
Assembly, Jumper Array, Non-Select Switch Option	122012
Assembly Drawing - Adapter, Tape Read, Kennedy, Cipher	122018
Assembly Drawing - Adapter, Tape Write, Kennedy, Cipher	122019
Schematic - Adapter, Tape Write Connector	122021
Schematic - Adapter, Tape Read Connector	122022
Assembly, Adapter, Tape Write, Kennedy 9800	122034
Assembly, Adapter, Tape Read, Kennedy 9800	122035
Schematic - Tape Control Adapter	122036
Assembly - Adapter, Tape Control Connector	122037
Assembly - Adapter, Tape Control Connector, 90° Mounting	122038
Assembly - Adapter, Tape Control Connector, 2-inch Standoff	122039
Assembly - Adapter, Tape Read, Reverse Image, 90°	122043
Modification Drawing, Tape Control Adapter (Config. "N")	122044
Modification Drawing, Cipher 900X (Config. "A")	79000410
Modification Drawing, Cipher 900X (Config. "B")	79000642
Notes	

PURPOSE:

THIS MODIFICATION REQUIRED FOR CONTROL OF QUANTEX TAPE DRIVES.

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	REDRAWN TO CORRECT DETAIL FOR E OR F ARTWORK (REF ECQ 780)	10-2-80	<i>Kip</i>

SHEET (2) OF SCHEMATIC 122036 IS ALTERED AS OUTLINED BELOW.



SOLDER SIDE VIEW
IC. LOCATION "C"

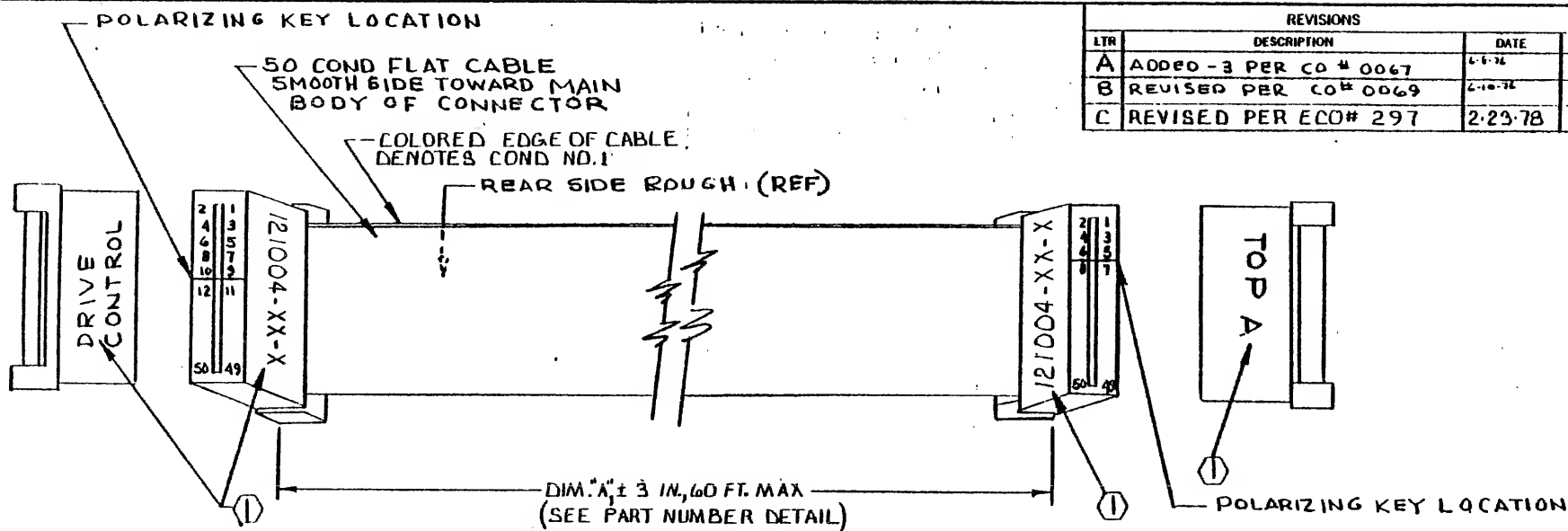
REWORK INSTRUCTIONS:

FOR ASSY. 122037, 122038, 122039

- CUT ETCH 2 PLCS AT C-8 (SOLDER SIDE)
- ADD JUMPER FROM C-10 TO FEED-THRU ON ETCH THAT WAS CONNECTED TO C-8
- IDENTIFY AT ASSY NO. WITH "CONF 5" USING BLACK INK.

OCT 2 1980

TOLERANCES UNLESS OTHERWISE SPECIFIED		western peripherals™ TUSTIN, CALIFORNIA	
FRACTIONS	DEC	ANGLES	
±	±	±	
APPROVALS	DATE	MODIFICATION DWG- TAPE CONT. ADAPTER, CONF "S"	
DRAWN BY ANDERSON	10-1-80		
CHECKED H. L. G. L.	10-2-80	SCALE 1/2" = 1"	SIZE B
		DRAWING NO. 112001	
DO NOT SCALE DRAWING			SHEET 1 OF 1



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	ADDED - 3 PER CO # 0067	6-1-76	N.D.
B	REVISED PER CO # 0069	2-10-76	N.D.
C	REVISED PER ECO# 297	2-23-78	N.D., 9-10

NOTES.

- ① MARK CHARACTERS SHOWN USING CONTRASTING COLOR INK.
SEE PART NUMBER DETAIL FOR MARKING OF VARIABLE CHARACTERS (X's).

2. ASSEMBLY:

USE 3M PRESS NO. 3440
USE LOCATOR PLATE NO. 3443-II
USE SETTING NO 9 OF GAUGE 3436-I
CUT CABLE USING SCOTCHFLEX CABLE SHEAR OR EQUIV.
SEAT CABLE INTO COVER USING SCOTCHFLEX TOOL
NO. 3453, CHECK FOR ALIGNMENT
PLACE BODY ON LOCATOR PLATE
POSITION COVER AND CABLE OVER CONN BODY
LOWER HANDLE TO COMPLETE ASSY
REMOVE BY LIFTING ON CONNECTOR

PART NUMBER DETAIL


121004-XX-X

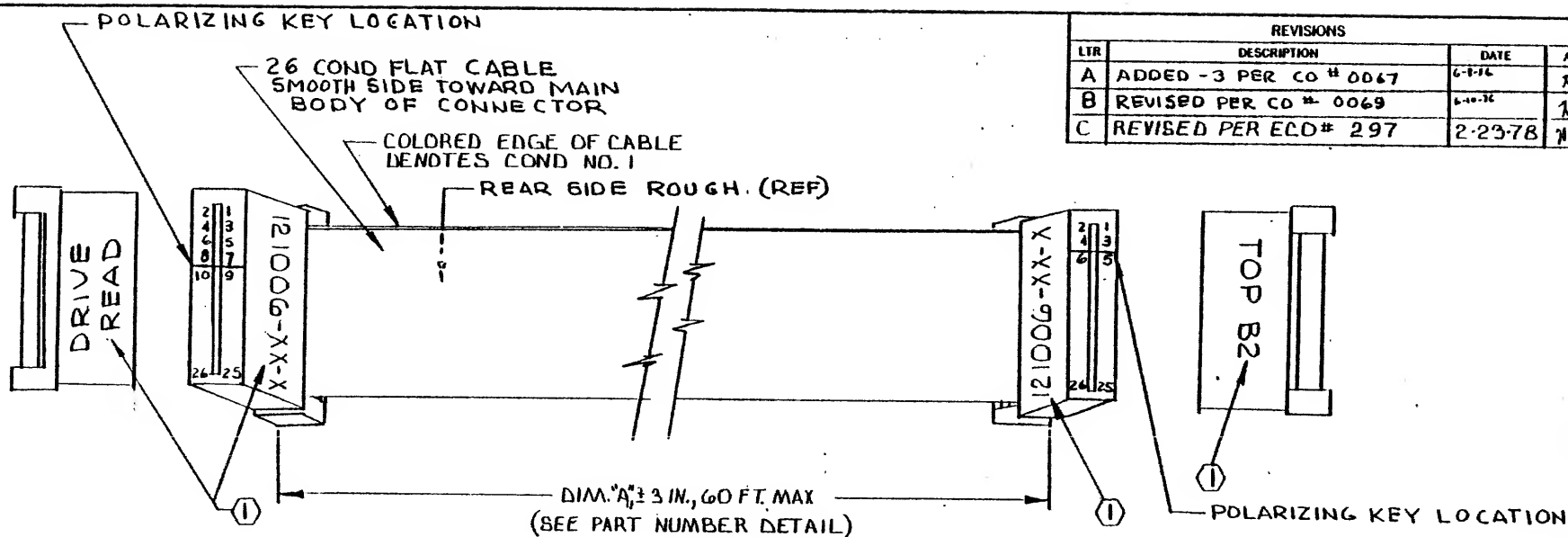
BASIC PART NUMBER _____

DASH NUMBER IN FEET (REF. DIM. A)
(-07 FOR 7 FT., -10 FOR 10 FT., ETC.) _____

LATEST REVISION LETTER _____

FOR PARTS SEE PARTS LIST 121004

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES			 western peripherals ANAHEIM, CALIFORNIA		
± ± ±			ASSEMBLY- CABLE, CONTROL		
APPROVALS		DATE			
DRAWN CORUM		6-1-76			
CHECKED J.D.		6-1-76			
			SCALE	SIZE	DRAWING NO.
			NONE	B	121004
			DO NOT SCALE DRAWING		SHEET



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	ADDED -3 PER CO # 0067	6-1-76	N.D.
B	REVISED PER CO # 0069	6-10-76	N.D.
C	REVISED PER ECO# 297	2-23-78	N.D., 7-76

NOTES:

- ① MARK CHARACTERS SHOWN USING CONTRASTING COLOR INK.
SEE PART NUMBER DETAIL FOR MARKING OF VARIABLE CHARACTERS (X's).


2. ASSEMBLY:

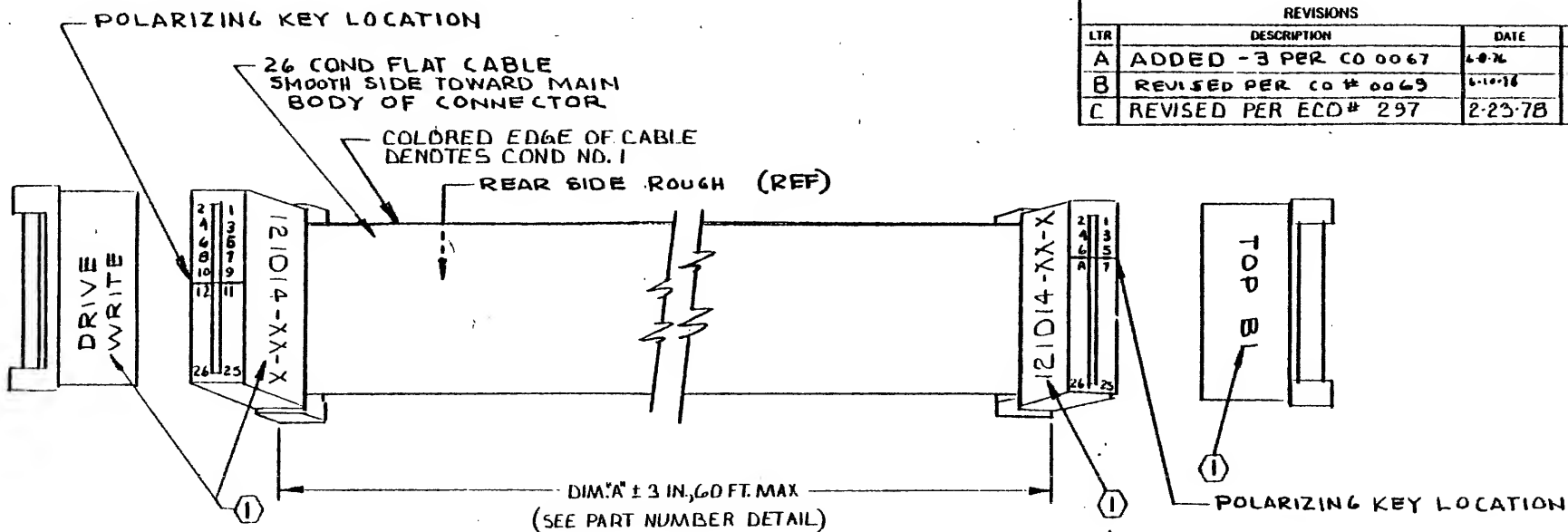
- USE 3M PRESS NO 3440
- USE LOCATOR PLATE NO. 3443-11
- USE SETTING NO. 9 OF GAUGE NO. 3436-1
- CUT CABLE USING SCOTCHFLEX CABLE SHEAR OR EQUIV.
- SEAT CABLE INTO COVER USING SCOTCHFLEX TOOL NO 3453, CHECK FOR ALIGNMENT
- PLACE BODY ON LOCATOR PLATE
- POSITION COVER AND CABLE OVER CONN BODY
- REMOVE HANDLE TO COMPLETE ASSY
- REMOVE BY LIFTING ON CONNECTOR

PART NUMBER DETAIL

	121006-XX-X
BASIC PART NUMBER	
DASH NUMBER IN FEET (REF DIM. "A")	
(-07 FOR 7 FT., -10 FOR 10 FT., ETC.)	
LATEST REVISION LETTER	

FOR PARTS SEE PARTS LIST 121006

TOLERANCES UNLESS OTHERWISE SPECIFIED			 western peripherals ANAHEIM, CALIFORNIA		
FRACTIONS	DEC.	ANGLES			
±	±	±	ASSEMBLY CABLE, READ		
APPROVALS	DATE				
DRAWN C. RUM	6-1-76				
CHECKED J.D.	6-1-76				
			SCALE NONE	SIZE B	DRAWING NO. 121006
			DO NOT SCALE DRAWING		SHEET



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	ADDED -3 PER CO 0067	6-8-76	N.D.
B	REVISED PER CO # 0069	6-10-76	N.D.
C	REVISED PER ECO # 297	2-23-78	N.D., 4-78

NOTES:

- ① MARK CHARACTERS SHOWN USING CONTRASTING COLOR INK.
SEE PART NUMBER DETAIL FOR MARKING OF VARIABLE CHARACTERS (X's).

2. ASSEMBLY:

USE 3M PRESS NO. 3440.
USE LOCATOR PLATE NO 3443-II
USE SETTING NO 9 OF GAUGE 3436-I
CUT CABLE USING SCOTCHFLEX CABLE SHEAR OR EQUIV.
SEAT CABLE INTO COVER USING SCOTCHFLEX
TOOL NO 3453, CHECK FOR ALIGNMENT
PLACE BODY ON LOCATOR PLATE
POSITION COVER AND CABLE OVER CONN BODY
LOWER HANDLE TO COMPLETE ASSY
REMOVE BY LIFTING ON CONNECTOR

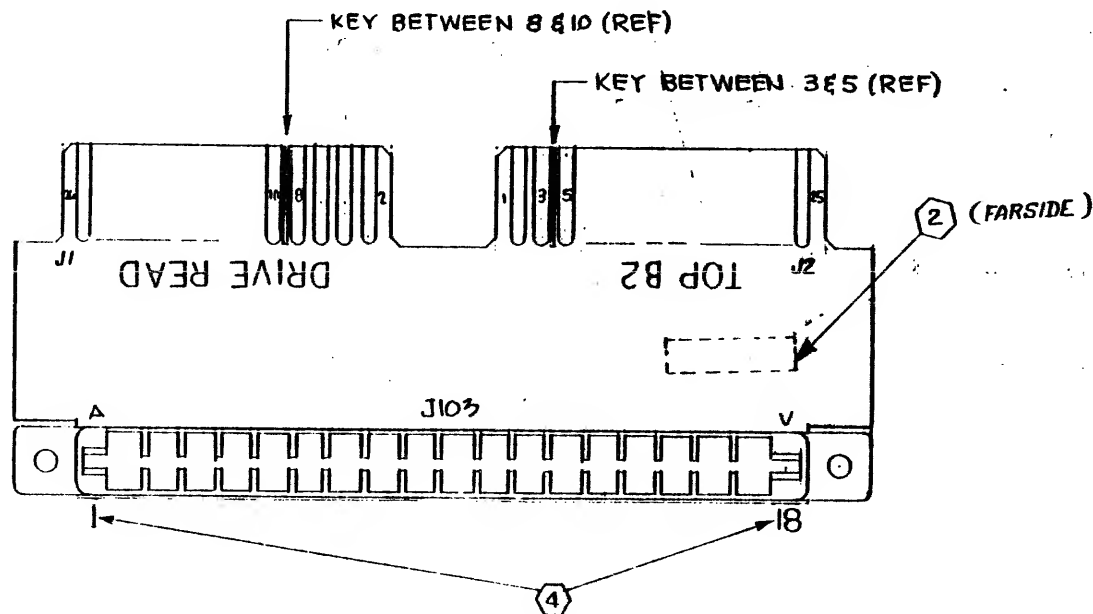
PART NUMBER DETAIL

BASIC PART NUMBER	121014	-XX-X
DASH NUMBER IN FEET (REF. DIM. "A")		
(-07 FOR 7 FT., -10 FOR 10 FT., ETC)		
LATEST REVISION LETTER		

FOR PARTS SEE PARTS LIST 121014


TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES			western peripherals ANAHEIM, CALIFORNIA		
APPROVALS	DATE		ASSEMBLY- CABLE, WRITE		
DRAWN CORUM	6-1-76				
CHECKED N.D.	6-1-76		SCALE NONE	SIZE B	DRAWING NO. 121014
			DO NOT SCALE DRAWING		
			SHEET		

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	REV PER CO NO. 0105	9-8-76	
B	E.C.O NO.-0190	6-6-77	J.D.-11-77
C	REVISED NOTE 2 PER ECO.#415	2/2/79	J.V.N. 5-79
D	ADDED NOTE ④ PER ECO.#504	6-20-79	K.H.C. 12-79

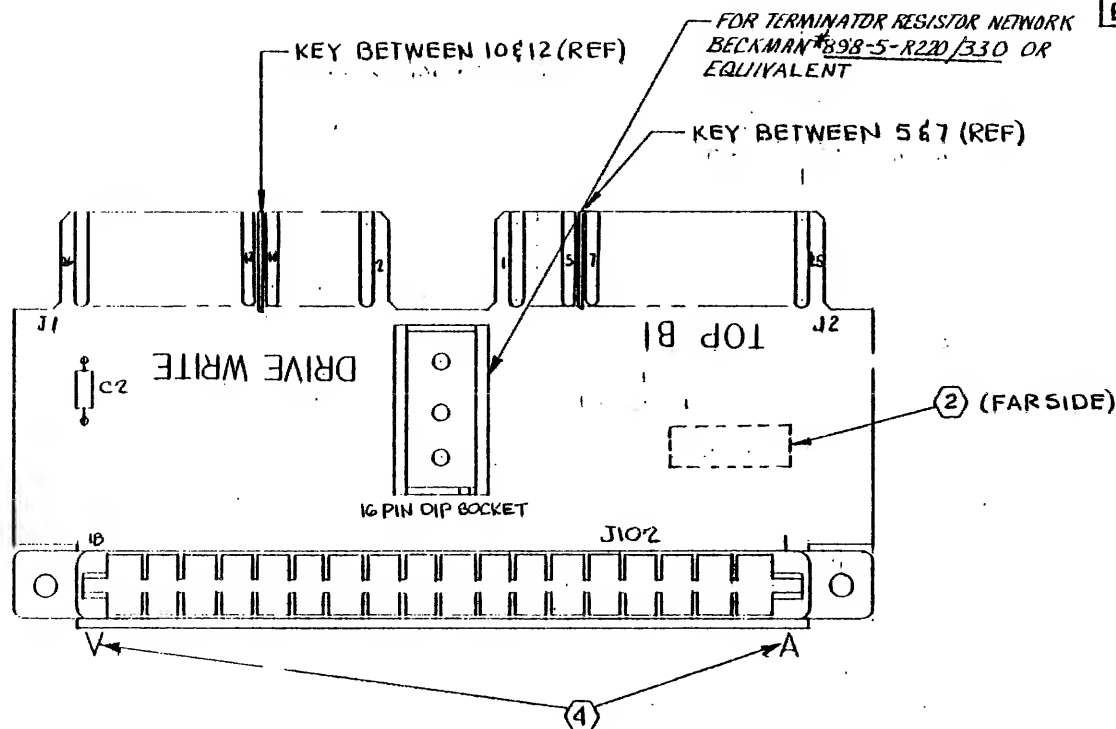


NOTE.

1. REF SCHEMATIC DWG NO. 122022
- ② REFER STAMP ASSY NO. WITH LATEST REV. LTR APPEND WHERE SHOWN USING BLK INK.
3. FOR MATL. SEE P/L 122005
- ④ MARK CHARACTERS SHOWN (1 & 18) ON SIDE OF CONNECTOR USING CONTRASTING INK.

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		 western peripherals ANAHEIM, CALIFORNIA	
APPROVALS DRAWN HRB CHECKED AL		DATE 2-13-76 2-25-76	
SCALE 2:1		SIZE B	DRAWING NO. 122005
DO NOT SCALE DRAWING		SHEET OF 1	

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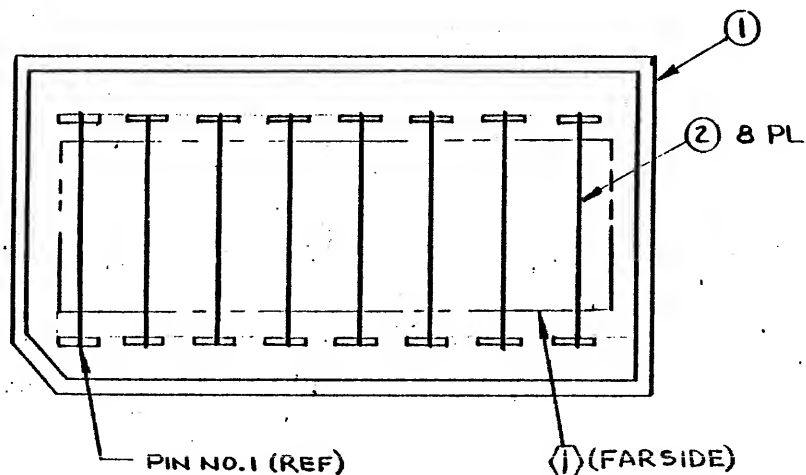
NOTE:

1. REF SCHEMATIC DWG. NO. 122021.
2. RUBBER STAMP ASSY NO. WITH LATEST REV LTR APPROX. WHERE SHOWN USING BLK INK.
3. FOR MATL SEE P/L 122006.
4. MARK CHARACTERS SHOWN (A & V) ON SIDE OF CONNECTOR USING CONTRASTING INK.

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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO.-0190	6-6-77	J.D. 6-11-77
B/C	ADVANCED REV LTR TO AGREE WITH P/L	2/1/79 J.D.	J.H.N. 2-6-79
D	REVISED NOTE 2 PER ECO# 416	2/1/79 J.D.	J.H.N. 2-6-79
E	ADDED NOTE 4 PER ECO# 504	6-20-79 J.D.	J.D. 6-20-79

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±			 western peripherals <small>ANAHEIM, CALIFORNIA</small>	
APPROVALS		DATE	ASSEMBLY DWG. ADAPTER, TAPE WRITE CONNECTOR	
DRAWN	HRB	2-12-76		
CHECKED	AL	2-15-76	SCALE	DRAWING NO.
			2:1	B 122006
			DO NOT SCALE DRAWING	SHEET 1 OF 1



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED

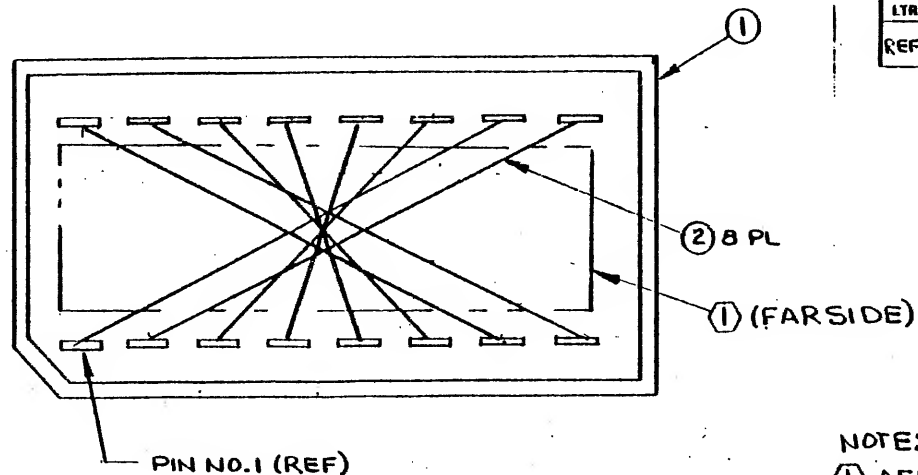
NOTE: UNLESS OTHERWISE SPECIFIED
 ① AFFIX ADHESIVE LABEL WITH PART NO. & LATEST REV LTR WHERE SHOWN

WIRE LIST		
WIRE NO.	FROM PIN NO.	TO PIN NO.
1	1	16
2	2	15
3	3	14
4	4	13
5	5	12
6	6	11
7	7	10
8	8	9

BILL OF MATERIALS

ITEM	NO. REQD	PART NO.	DESCRIPTION	REMARKS
1	1	CA-16P-12	DIP PLUG, 16 PIN	CIRCUIT ASSY. OR EQUIV.
2	A/R		WIRE, INSULATED, #30 AWG SOLID	WIRE WRAP WIRE

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		 ANAHEIM, CALIFORNIA	
APPROVALS DRAWN CORRECTED CHECKED 7.0.		DATE 11-18-76 11-18-76	
SCALE NONE		SIZE B	DRAWING NO. 122010
DO NOT SCALE DRAWING			SHEET 1 OF 1



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
REF	REC. CHG: ADD FARSIDE TO (1) (ALL PARTS MADE CONFORM)		

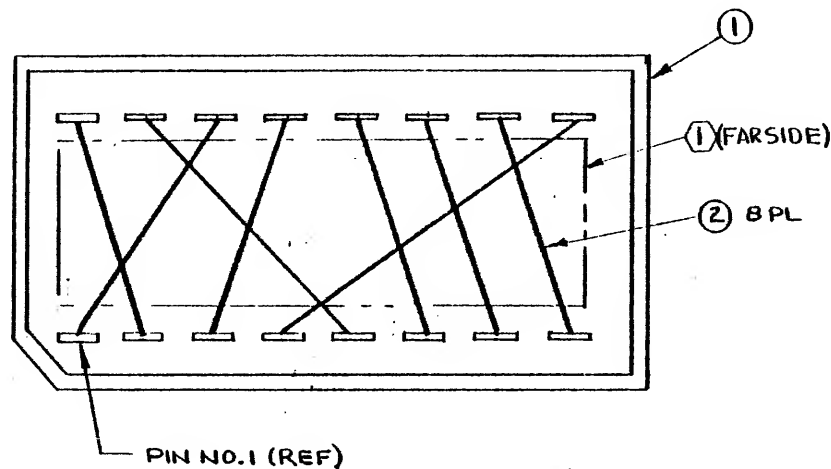
WIRE LIST		
WIRE NO.	FROM PIN NO.	TO PIN NO.
1	1	10
2	2	9
3	3	11
4	4	12
5	5	13
6	6	14
7	7	16
8	8	15

NOTE: UNLESS OTHERWISE SPECIFIED
 (1) AFFIX ADHESIVE LABEL WITH PART NO. & LATEST REV LTR WHERE SHOWN

BILL OF MATERIALS

ITEM	NO. REQD	PART NO.	DESCRIPTION	REMARKS
1	1	CA-16P-12	DIP PLUG, 16-PIN	CIRCUIT ASSY OR EQUIV
2	A/R		WIRE, INSULATED, #30 AWG SOLID	WIRE WRAP WIRE

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±			western peripherals ANAHEIM, CALIFORNIA	
APPROVALS		DATE		
DRAWN CORUM		11-18-76		
CHECKED V.D.		11-18-76		
SCALE NONE		SIZE B	DRAWING NO. 122011	
DO NOT SCALE DRAWING				SHEET 1 OF 1



WIRE LIST		
WIRE NO.	FROM PIN NO.	TO PIN NO.
1	1	14
2	2	16
3	3	13
4	4	9
5	5	15
6	6	12
7	7	11
8	8	10

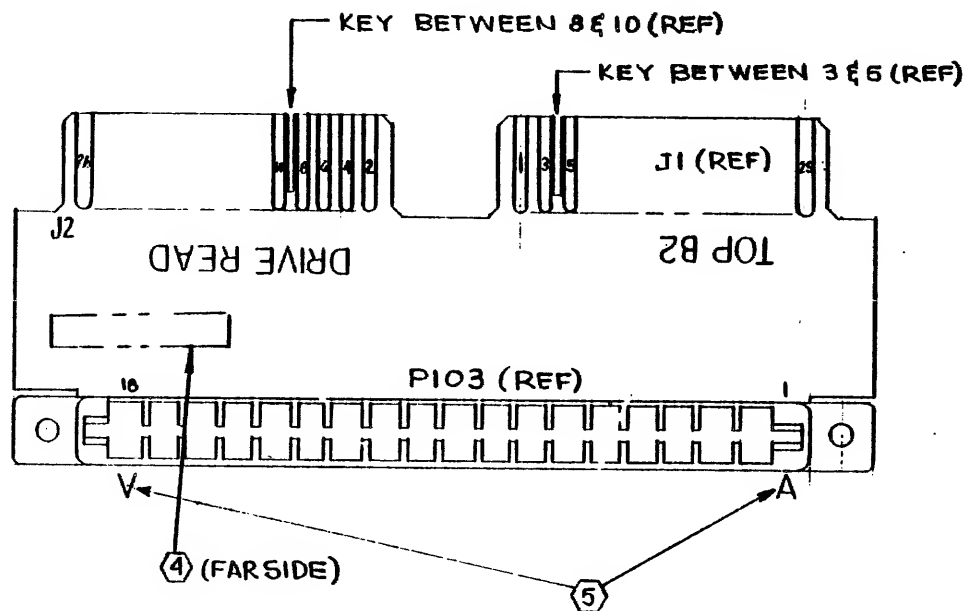
BILL OF MATERIALS

ITEM	NO. REQD	PART NO.	DESCRIPTION	REMARKS
1	1	CA-16P-12	DIP PLUG, 16-PIN	CIRCUIT ASSY OR EQUIV
2	A/R		WIRE, INSULATED, #30 AWG SOLID	WIRE WRAP WIRE

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED

NOTE: UNLESS OTHERWISE SPECIFIED
 ① AFFIX ADHESIVE LABEL WITH PART NO.
 & LATEST REV LTR WHERE SHOWN

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		western peripherals ANAHEIM, CALIFORNIA	
APPROVALS DRAWN CHECKED J.D.		DATE 11-18-76 11-18-76	
SCALE NONE		SIZE B	DRAWING NO. 122012
DO NOT SCALE DRAWING			SHEET 1 OF 1



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INCORP. CO # 0145	1-21-77	J.D. 1-24-77
B	E.C.O. NO. - 0190	6-6-77	J.D. 6-11-77
C	DELETED NOTE 2 PER E.C.O. #417	11-24-79	J.H. 11-28-79
D	ADDED NOTE ⑤ PER ECO #504	6-20-79	W.J. 6-20-79


NOTE: UNLESS OTHERWISE SPECIFIED
1. REF SCHEMATIC DWG NO. 122022

2.

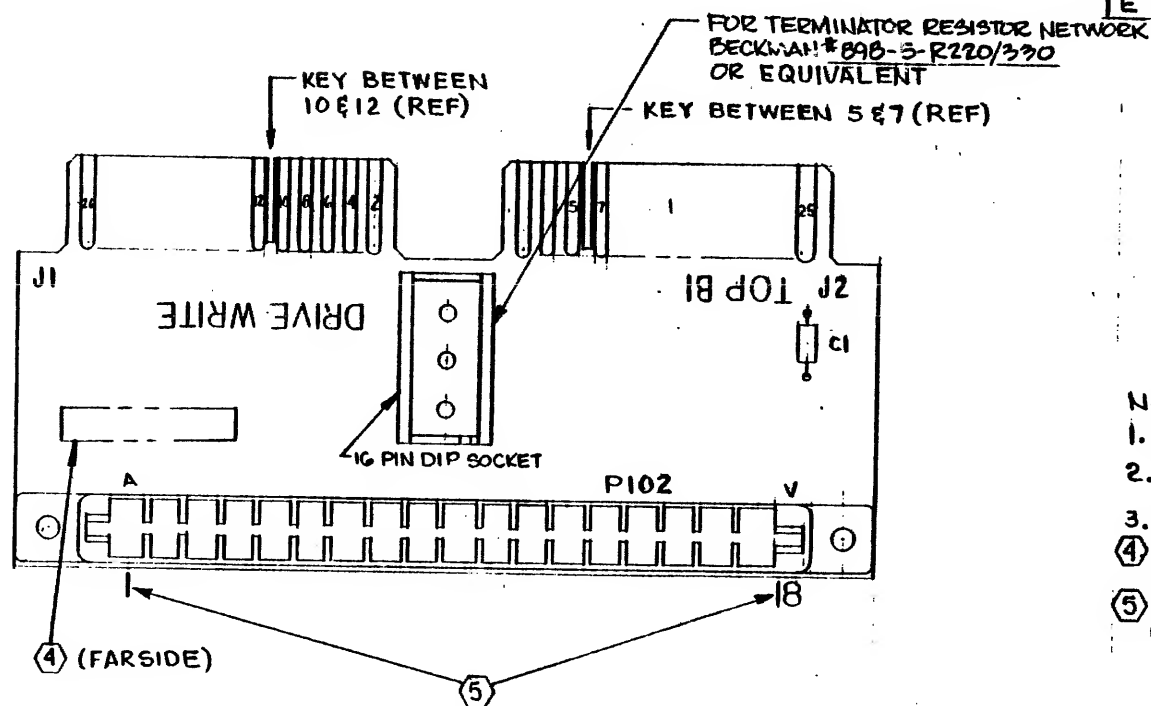
3. FOR MATERIAL SEE P/L 122018

④ RUBBER STAMP ASSY NO. WITH LATEST REV
LTR APPROX WHERE SHOWN USING BLK INK.

⑤ MARK CHARACTERS SHOWN (A&V) ON SIDE OF
CONNECTOR USING CONTRASTING INK.


TOLERANCES UNLESS OTHERWISE SPECIFIED		 western peripherals ANAHEIM, CALIFORNIA	
FRACTIONS DEC. ANGLES		ASSEMBLY DWG. ADAPTER, TAPE READ KENNEDY CIPHER	
APPROVALS	DATE	SCALE	SIZE
DRAWN HRB	2-15-76	2:1	B
CHECKED AL	2-25-76		DRAWING NO. 122018
		DO NOT SCALE DRAWING	SHEET 1 OF 1

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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INCORPORATE CO # 0146	1-21-77	J.D. 1-24-77
B	INCORP ECD 172	5/11/77	J.D. 5-11-77
C	INCORP. ECD. NO. -0190	6-6-77	J.D. 6-11-77
D	DELETED NOTE 2 & CHANGED ECD 118	11/24/79	J.H. 11-24-79
E	ADDED NOTE (5) PER ECO # 504	6-20-79	10/1/79 C. 10-79

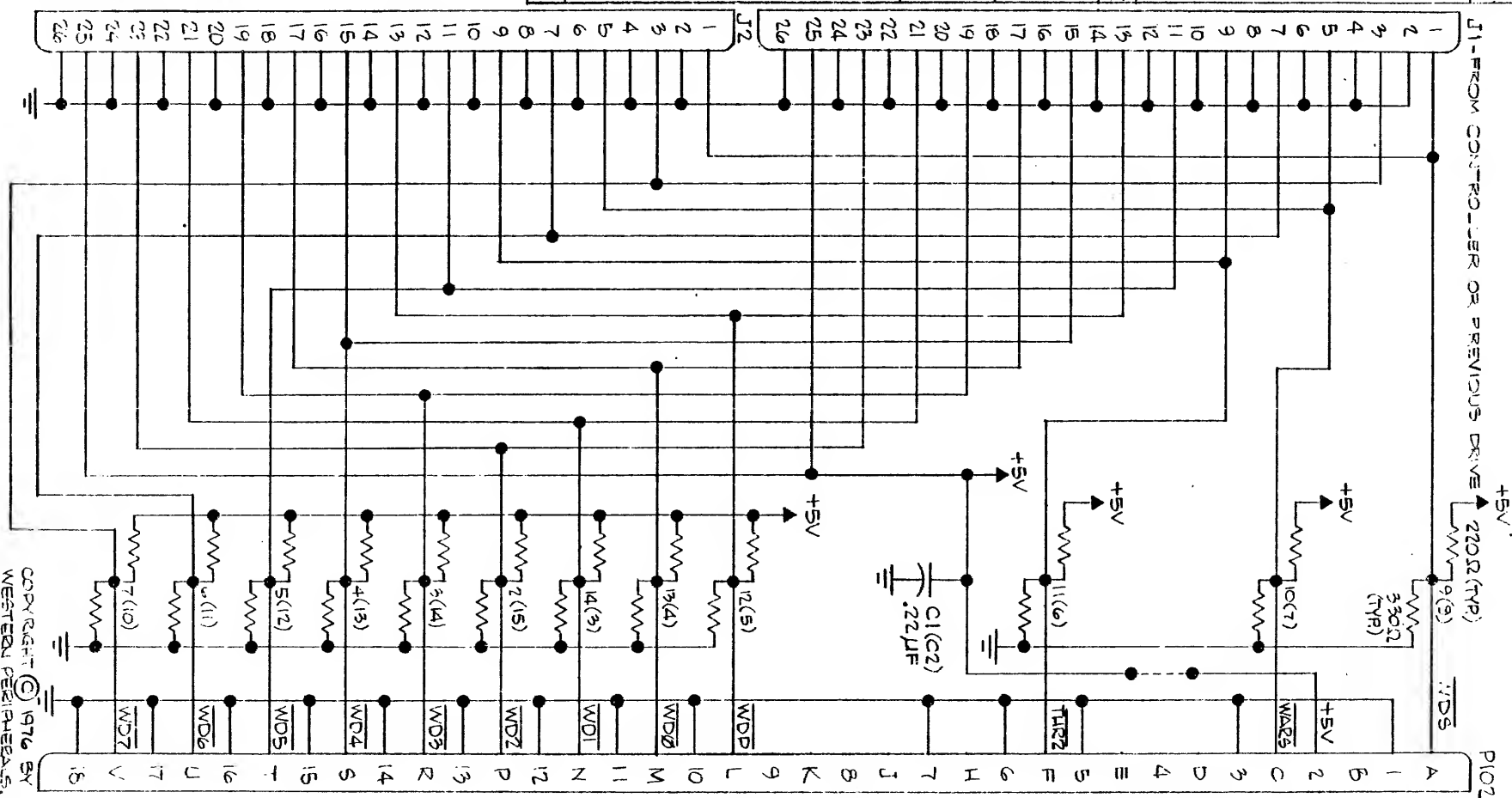
- NOTE: UNLESS OTHERWISE SPECIFIED
1. REF SCHEMATIC DWG NO. 122021
 - 2.
 3. FOR MATERIAL SEE P/L 122019
 4. RUBBER STAMP ASSY NO. WITH LATEST REV LTR APPROX WHERE SHOWN
 5. MARK CHARACTERS (1 & 18) ON SIDE OF CONNECTOR USING CONTRASTING INK.

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		 Western Peripherals ANAHEIM, CALIFORNIA	
APPROVALS DRAWN <i>HERB</i> 2-12-76 CHECKED <i>AL</i> 2-15-76		ASSEMBLY DWG. ADAPTER, TAPE WRITE KENNEDY-CIPHER	
SCALE 2:1		SIZE B	DRAWING NO. 122019
DO NOT SCALE DRAWING		SHEET OF	

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B	INCORP ECO 172	5/11/77	N.D.	REVISIONS			
C	IDENTIFIED SIGNALS AND CONNECTORS PER ECO 169	9-18-80	N.D.	LTR	DESCRIPTION	DATE	APPROVED
				A	ECO-0147	9-30-77	N.D.

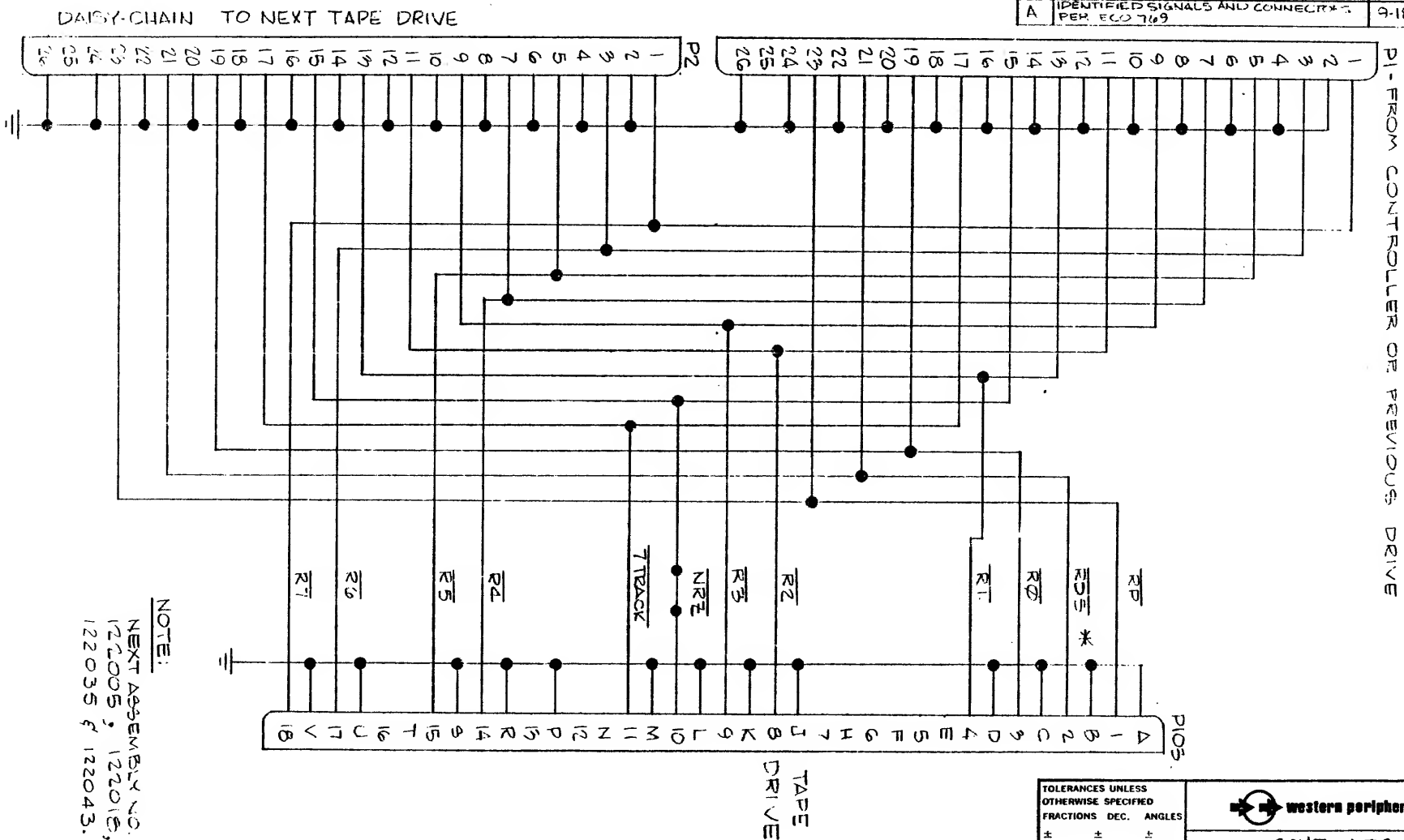


TO
TAPE
DRIVE

- NOTES:**
1. NEXT AGGY NO.
122006, 122019,
122020, 122021,
2. PIN NUMBERS AND
REFERENCE DESIG-
NATIONS SHOW IN
PARENTHESES APPLY
TO AGGY 122006,
122034.

TOLERANCES UNLESS OTHERWISE SPECIFIED		 western peripherals ANAHEIM, CALIFORNIA	
FRACTIONS	DEC. ANGLES		
±	±	±	
APPROVALS DRAWN <i>HRB</i>		SCHEMATIC ADPTR. TAPE WRITE CONNECTOR	
DATE 1-12-76			
CHECKED <i>ML</i>		SCALE NONE	
1-26-76		SIZE B	
		DRAWING NO. 122021	
		DO NOT SCALE DRAWING	
		SHEET 1 OF 1	

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	IDENTIFIED SIGNALS AND CONNECT* PER ECO 7/69	9-18-80	



TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRACTIONS	DEC.	ANGLES
±	±	±

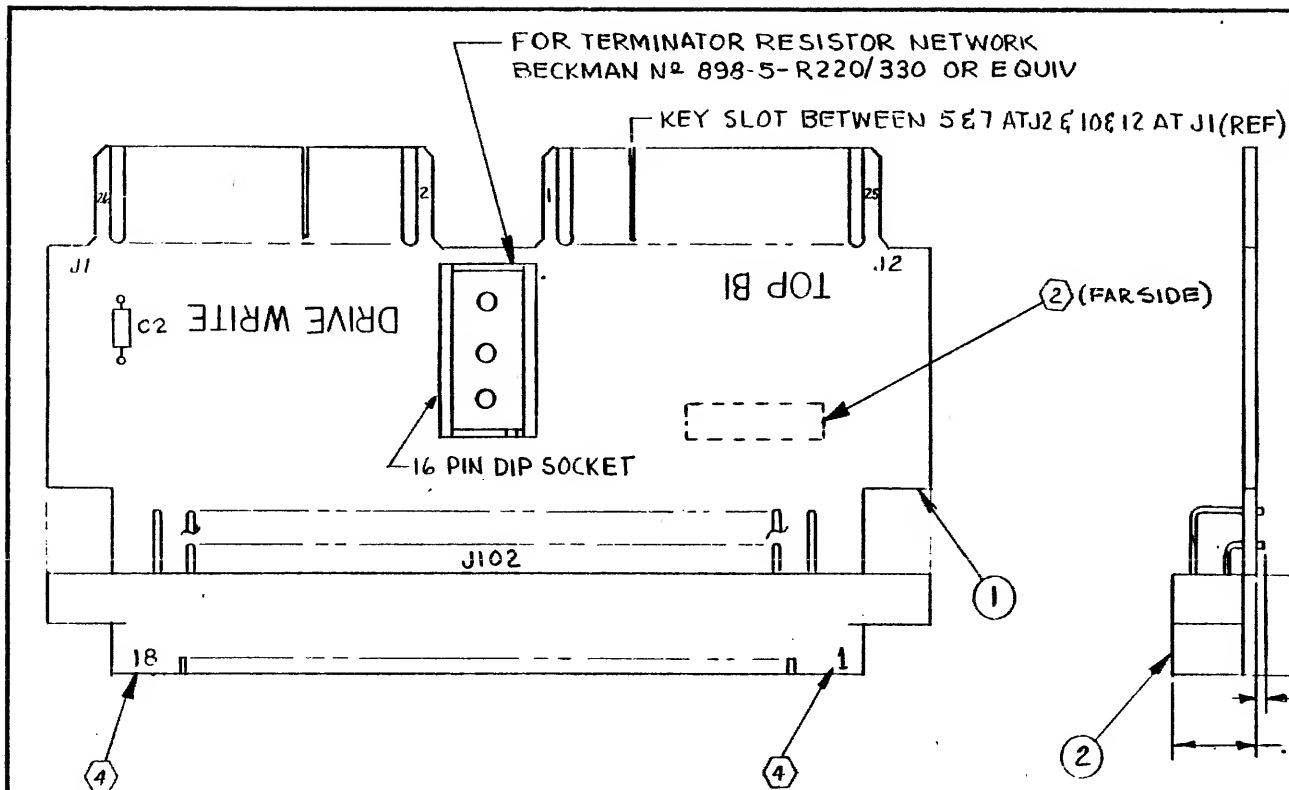
APPROVALS	DATE
DRAWN <i>HRB</i>	1-13-76
CHECKED <i>TL</i>	1-26-76



SCHEMATIC
ADPTR., TAPE READ
CONNECTOR

SCALE NONE	SIZE B	DRAWING NO. 122022
---------------	-----------	-----------------------

DO NOT SCALE DRAWING SHEET 1 OF 1



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INCORP ECO 172	3-11-77	N.S. 5-11-77
B	INCORP E.C.O. NO. 0190	6-6-77	N.S. 11-77
C	INCORP. E.C.O. NO. 0197	8-8-77	N.S. 8-177
D	ADD NOTE 4 PER ECO 355	11-24-77	11-24-77
E	ADVANCE REV LTR TO AGREE WITH P/L	11-24-77	11-24-77
F	CHANGED NOTE 2 PER ECO 416	11-24-77	11-24-77
G	INC ECO # 852 AND CHG ASSY NO. LOCATION	3-10-81	3-10-81

MAR 27 1981

④ RUBBER STAMP CHARACTERS SHOWN USING WHITE INK.

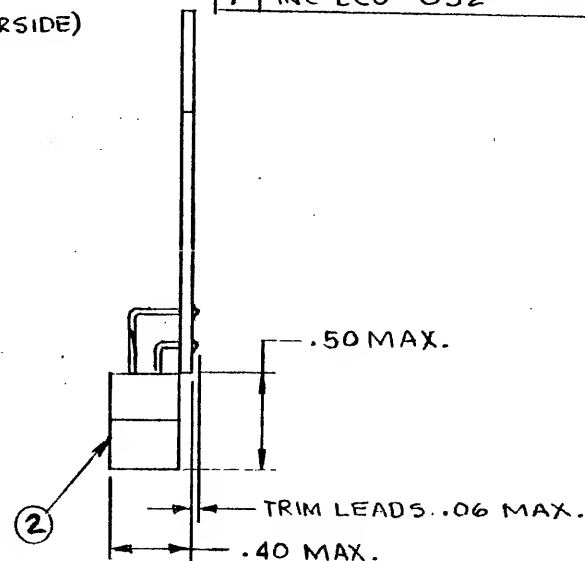
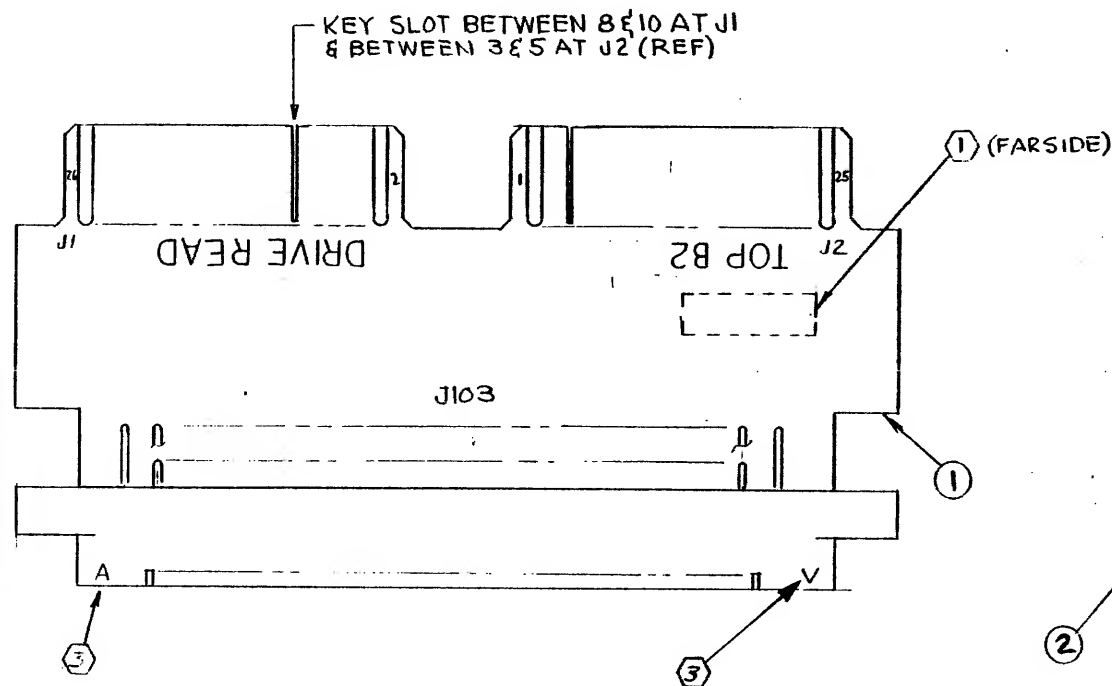
③ FOR MATERIAL LIST SEE P/L 122034.

② RUBBER STAMP ASSY NO. 8 LATENT REV LTR APPROX WHERE SHOWN USING BLK INK.

1. REF. SCHEMATIC DWG NO. 122021.

NOTE : UNLESS OTHERWISE SPECIFIED.


TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		western peripherals ANAHEIM, CALIFORNIA	
APPROVALS DRAWN CORUM CHECKED		DATE 6-11-76 SCALE 2X SIZE B DRAWING NO. 122034	
		DO NOT SCALE DRAWING SHEET 1 OF 1	



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO. 0190	6-6-77	N.D. 6-11-77
B	E.C.O. NO. 0197	8-8-77	N.D. 8-9-77
C	ADDED NOTE 3 PER ECO #355	11/1/77	11/1/77
D	ADVANCED REV LTR TO AGREE WITH P/L	11/1/77	11/1/77
E	CHANGED NOTE 1 PER ECO #415	11/1/77	11/1/77
F	INC ECO #852	11/1/77	11/1/77


MAR 27 1981

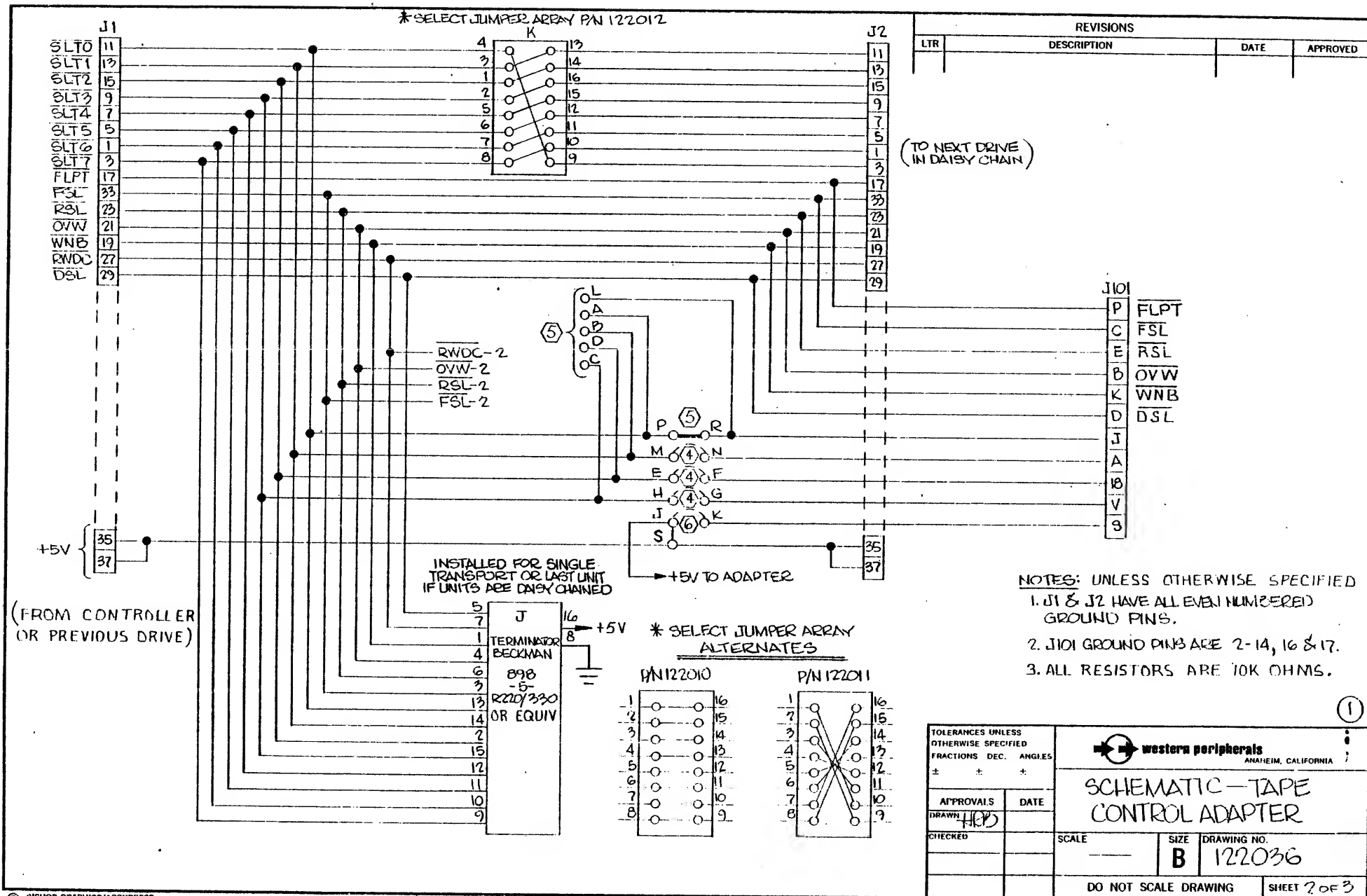
(3) RUBBER STAMP CHARACTERS SHOWN USING WHITE INK.
 2. REF SCHEMATIC DWG NO. 122022.
 (1) RUBBER STAMP ASSY NO. 4 LATE ST REV LTR
 APPROX WHERE SHOWN USING RIK INK.
 NOTE: UNLESS OTHERWISE SPECIFIED.

TOLERANCES UNLESS OTHERWISE SPECIFIED		 western peripherals ANAHEIM, CALIFORNIA	
FRACTIONS	DEC.	ANGLES	
±	±	±	
APPROVALS		DATE	
DRAWN		6-11-76	
CHECKED		N/c	
SCALE		2 X	SIZE B
DRAWING NO.		122035	
DO NOT SCALE DRAWING			SHEET 1 of 1

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	CORRECTED SWITCH SETTING CHART FOR SA4 PER ECO 178.	5-4-77	
B	REDRAWN PER ECO 236.	5-16-78	H.D. 5-16-78
C	CHANGED I.C. LOC. PER ECO 806	12-9-78	(Signature)

SWITCH A	SWITCH	SETTING S	SYSTEM CONSIDERATIONS
1	ON	FOR DRIVES THAT REQUIRE REWIND COMMAND REMOVAL PRIOR TO BOT	1. REMOVE ALL INTERFACE TERMINATORS FROM TRANSPORT(S)
	OFF	FOR DRIVES THAT DO NOT REQUIRE REWIND COMMAND REMOVAL PRIOR TO BOT	2. INSTALL CONTROL TERMINATOR ONLY IN LAST DAISY CHAIN POSITION
2	ON	FOR DRIVES THAT STORE EOT STATUS NOTE: A5 SHOULD BE OFF	3. CORRECTLY IDENTIFY CONFIGURATION AND SET SWITCHES ACCORDINGLY
	OFF	FOR DRIVES THAT DO NOT STORE EOT STATUS NOTE: A5 SHOULD BE ON	
3	ON	FOR 7 TRACK DRIVES	NOTES: 1. FOR 7 TRACK DRIVES IN DRIVE DAISY CHAINS, ONLY PRIMARY SPEED SELECTION IS AVAILABLE. 2. REF. ASSY. DWG. 122037, 122038, & 122039. ③ 122010 INSTALLED WHEN TRANSPORT HAS 4- POSITION UNIT SELECT SWITCH (SEE EXCEPTION BELOW). 122011 INSTALLED IN 4 TH TRANSPORT IF MORE THAN 4 TRANSPORTS ARE DAISY CHAINED. 122012 INSTALLED WHEN TRANSPORT DOES NOT HAVE UNIT SELECT SWITCH. ④ FOR PERTEC COMPATIBLE UNIT SELECT OPTION: JUMPER E TO F, G TO H, AND M TO N. ⑤ FOR EXTERNALLY CONNECTED UNIT SELECT SWITCH: CUT ETCH BETWEEN P & R AND CONNECT EXTERNAL SWITCH TO A, B, C, D, & L. ⑥ TO POWER ADAPTER FROM TAPE TRANSPORT, CUT ETCH BETWEEN J & S AND JUMPER J TO K. 7. FOR CONFIGURATION "L" SEE DWG. 130047. 8. FOR CONFIGURATION "N" SEE DWG. 122044. 9. FOR CONFIGURATION "S" SEE DWG. 112001.
	OFF	FOR 9 TRACK DRIVES	
4	ON	FOR 7 TRACK 556/800 BPI DENSITY SELECTIONS OR 9 TRACK SECONDARY SPEED (SELECTION B)	
	OFF	FOR 7 TRACK 200/556 BPI DENSITY SELECTIONS OR 9 TRACK PRIMARY SPEED (SELECTION A)	
5	ON	FOR DRIVES THAT DO NOT STORE EOT STATUS NOTE: A2 SHOULD BE OFF	
	OFF	FOR DRIVES THAT STORE EOT STATUS NOTE: A2 SHOULD BE ON	
6	ON	FOR 9 TRACK NRZI ONLY DRIVE	
	OFF	FOR 7 TRACK DRIVES, 9 TRACK 1600 BPI DRIVES, OR 9 TRACK 800/1600 DUAL DENSITY	
7	ON	FOR DUAL DENSITY 9 TRACK DRIVES THAT DO NOT PRESENT NRZ STATUS ON DRIVE READ CONNECTOR	
	OFF	FOR DUAL DENSITY 9 TRACK DRIVES THAT DO PRESENT NRZ STATUS ON DRIVE READ CONNECTOR	
8	ON	FOR 7 TRACK DRIVES	
	OFF	FOR 9 TRACK DRIVES	

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		 western peripherals ANAHEIM, CALIFORNIA	
APPROVALS DRAWN T.M. CHECKED N.D.		DATE 2-15-78 5-16-78	
SCALE B		DRAWING NO. 122036	
DO NOT SCALE DRAWING		SHEET 1 OF 3	




- ⑥ MARK CHARACTERS SHOWN (A&V) ON SIDE OF CONNECTOR USING CONTRASTING INK.
 - ⑤ FOR OPTIONAL JUMPERING AND/OR JUMPER ARRAYS, REF J.O.A. & SCHEMATIC
 - ④ RUBBER STAMP ASSY NO. WITH LATEST REV LTR AND DASH NO. (IF REQD)
· APPROX WHERE SHOWN (FAR SIDE)
- 3.
2. FOR MATERIAL SEE P/L NO. 122037
1. REF SCHEMATIC 122036
- NOTE: UNLESS OTHERWISE SPECIFIED

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO.-0143	1-18-77	
B	E.C.O. NO.-0190	6-3-77	N.D. 11-77
	RECORD CHANGE: ADD CONF. "L" (REV. LTR. CHANGE NOT REQD.)	8-9-77	N.D. 8-9-77
	RECORD CHG: ADD CONF "N" (REV LTR CHG NOT REQD)	9-21-77	N.D. 9-28-77
	RECORD CHG: ADD SH NO. 2 (CLASSY) NO CHG TO BASIC BD SEE ECO# 0254 (NO REV LTR REQD)	NO. 2 11-16-77	N.D. 11-22-77
	ECO #299 (NO REV. LTR. CHANGE)	3-8-78	N.D. 3-7-78
C	USE "F" REV. PWB, REF. ECON. 236A	5-16-78 TARL CHAFFMAN	N.D. 5-16-78
D	DELETED NOTES 3 & 6 PER ECO #11	11-24-78	N.D. 11-24-78
E	CORRECT VALUE SHOWN FOR CAPACITOR PER ECO NO. 460	3-6-79 CHAFFMAN	N.D. 3-6-79
F	ADDED NOTE (C) PER ECO# 504	6-20-79	N.D. 6-20-79

G I C "H" S/B 74520 ECO 806

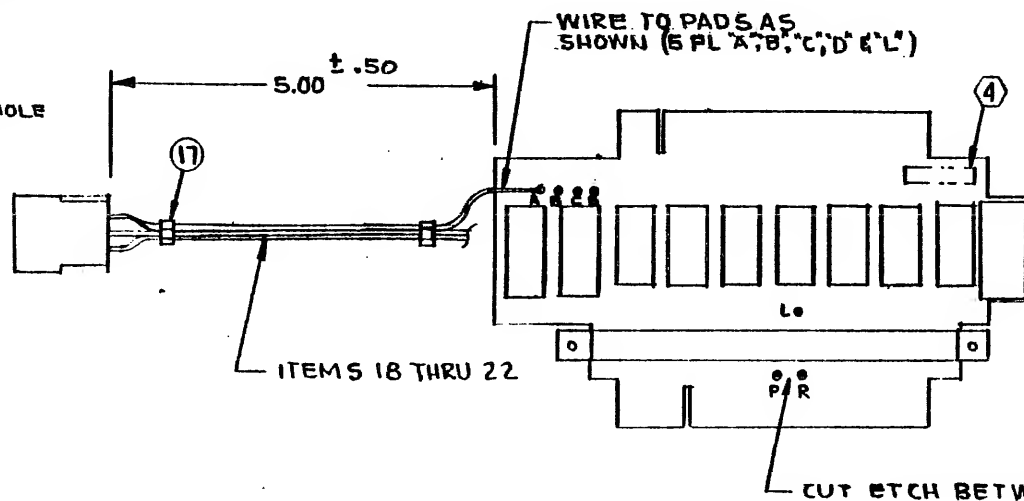
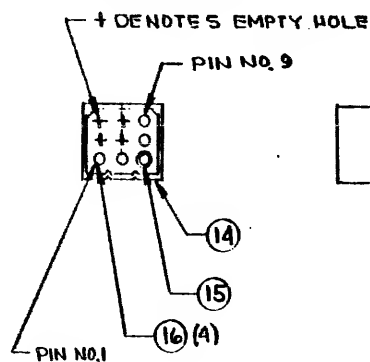
BASIC ASSY SHOWN
FOR -1 ASSY SEE SH NO. 2.

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		 western peripherals ANAHEIM, CALIFORNIA	
		ASSEMBLY- ADAPTER TAPE CONTROL CONNECTOR	
APPROVALS	DATE		
DRAWN COLUM	11-8-76		
CHECKED J.D.	12-16-76	SCALE	SIZE
		FULL	B
		DRAWING NO. 122037	
		DO NOT SCALE DRAWING	
		SHEET 1 OF 2	

0	3	YEL	(A)	122037-1
1	6	RED	(B)	
2	9	GRN	(D)	
3	2	ORG	(C)	
COM	1	BRN	(L)	

120037-1 WIRING DIAGRAM

ITEM NO.14
(9 PIN MOLEX PLUG, REF)



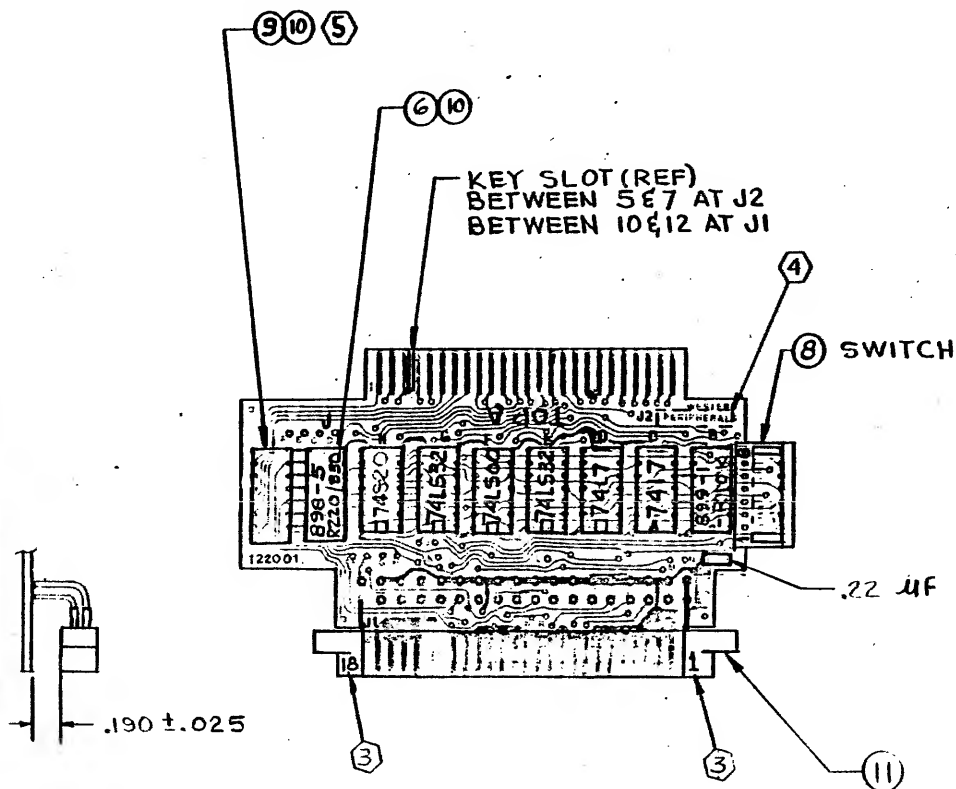
NOTE:

THE -1 ASSY IS USED ON PERTEC T9000 SERIES WITH OPTIONAL UNIT SELECT THUMBWHEEL SWITCH TERMINATED IN MOLEX CONNECTOR. COMPONENT REQUIREMENTS & MARKINGS ARE THE SAME AS FOR BASIC ASSY

-1 ASSY SHOWN
FOR BASIC ASSY SEE 5H NO.1

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED

TOLERANCES UNLESS OTHERWISE SPECIFIED		western peripherals	
FRACTIONS	DEC.	ANGLES	ANAHEIM, CALIFORNIA
±	±	±	
APPROVALS	DATE	ASSEMBLY— ADAPTER	
DRAWN	11-19-77	TAPE CONTROL CONNECTOR	
CORUM		SCALE	SIZE
CHECKED		FULL	B
		DRAWING NO.	122037 1
		DO NOT SCALE DRAWING	SHEET 2 OF 2



8. FOR CONFIGURATION "S" SEE DWG. 112001

7. FOR CONFIGURATION "N" SEE DWG. 122044

6.

⑤ FOR OPTIONAL JUMPERING AND/OR JUMPER ARRAYS, REF J.O.A. & SCHEMATIC

④ RUBBER STAMP ASSY NO. WITH LATEST REV LTR LOCATED APPROX WHERE SHOWN (FAR SIDE)

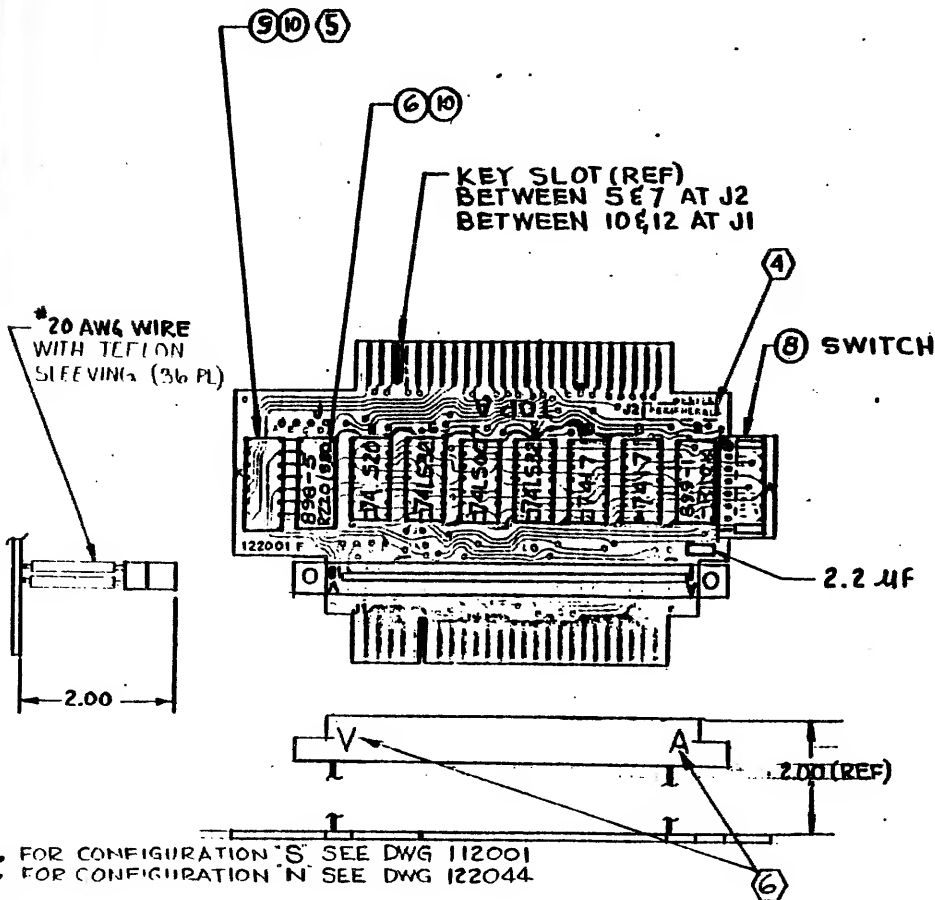
③ RUBBER STAMP CHARACTER SHOWN USING WHITE INK
2. FOR MATERIAL SEE P/L NO. 122038
1. REF SCHEMATIC 122036

NOTE: UNLESS OTHERWISE SPECIFIED

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO. - 0143	1-18-77	
B	E.C.O. NO. - 0190	6-3-77	N.D. 11-77
C	E.C.O. NO. - 0197	8-8-77	N.D. 8-9-77
	E.C.O. NO. - 299 (NO REV. LTR. CHG.)	3-8-78	N.D. 3-9-78
	ADDED NOTE 7. PER E.C.O. 257 AND DELETED REQUIREMENT FOR SLEEVING WIRE AT CONNECTOR	3-21-78	N.D. 3-21-78
D	USE "F" REV PWB, REF. ECO NO. 236A	5-16-78	N.D. 5-16-78
E	REVISED NOTE 3 PER E.C.O. 355	10-4-78	
F	DELETED NOTE 6 PER E.C.O. 414	11-4-78	
G	CHANGED I.C. AT LOC H PER E.C.O. 806	12-9-80	
H	INC ECO NO. 852	1-13-81	

27 1981

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		western peripherals ANAHEIM, CALIFORNIA	
APPROVALS DRAWN CORUM CHECKED J.D.		DATE 11-8-76 12-16-76	
SCALE FULL		SIZE B	DRAWING NO. 122038
DO NOT SCALE DRAWING			SHEET 1 OF 1



8. FOR CONFIGURATION 'S' SEE DWG 112001
7. FOR CONFIGURATION 'N' SEE DWG 122044

6. MARK CHARACTERS SHOWN (A & V) ON SIDE OF CONNECTOR USING CONTRASTING INK.
5. FOR OPTIONAL JUMPERING AND/OR JUMPER ARRAYS, REF J.O.A. & SCHEMATIC
4. RUBBER STAMP ASSY NO. WITH LATEST REV LTR LOCATED APPROX WHERE SHOWN (FAR SIDE)

3.

2. FOR MATERIAL SEE P/L NO. 122039

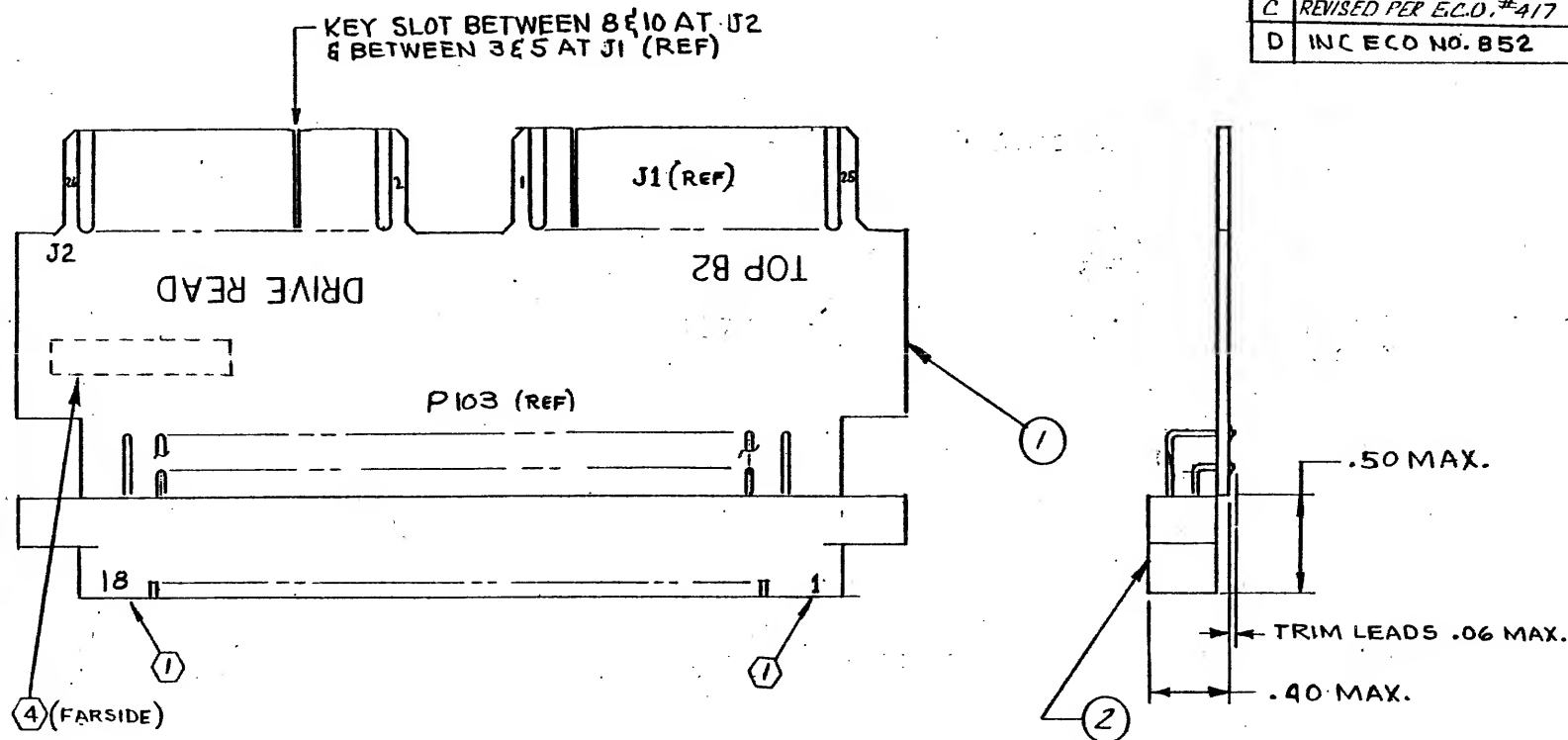
1. REF SCHEMATIC 122036

NOTE: UNLESS OTHERWISE SPECIFIED

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	E.C.O. NO.-0143	1-18-77	
B	E.C.O. NO.-0190	6-3-77	H.D. 11-77
C	E.C.O. NO.-0197	8-8-77	H.D. 8-9-77
	E.C.O. NO.-299 (NO REV. LTR. CHG.)	3-8-78	H.D. 3-9-78
	ADDED NOTE 7. PER E.C.O. 257	3-21-78	H.D. 3-21-78
D	USE 'F' REV. PWB, REF. ECO No. 236A	5-16-78	H.D. 5-16-78
E	DELETED NOTES 3 & 6 PER ECO #14	8/1/79	H.D. 8-1-79
F	ADDED NOTE 6 PER ECO #504	6-20-79	H.D. 6-20-79
G I.C. "H" S/B 7452D ECD 806			

TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES		western peripherals ANAHEIM, CALIFORNIA	
APPROVALS DRAWN CHECKED V.D.		DATE 11-8-78 12-8-78	
SCALE FULL		SIZE B	
DRAWING NO. 122039		SHEET 1 OF 1	
DO NOT SCALE DRAWING			

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	REVISED NOTE 1 PER E.C.O. #355	11/26/79	THP 2-9-79
B	ADVANCED REV LTR TO AGREE WITH P/L	11/26/79	THP 2-9-79
C	REVISED PER E.C.O. #417	11/26/79	THP 2-9-79
D	INC ECO NO. 852	3/24/81	1/2/81

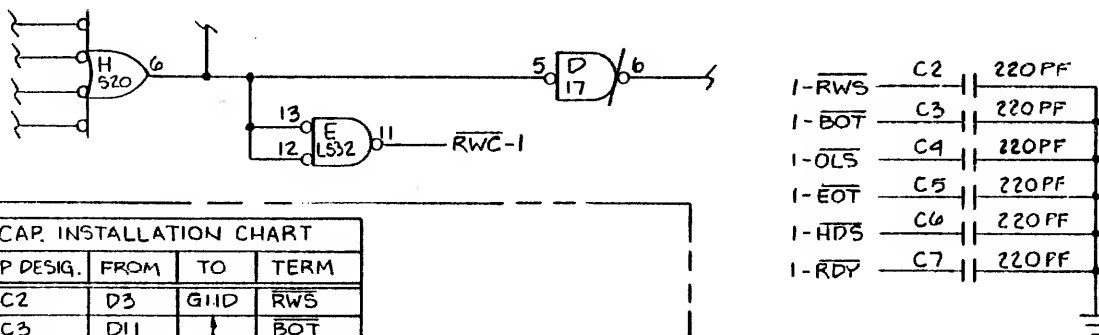


MAR 27 1981

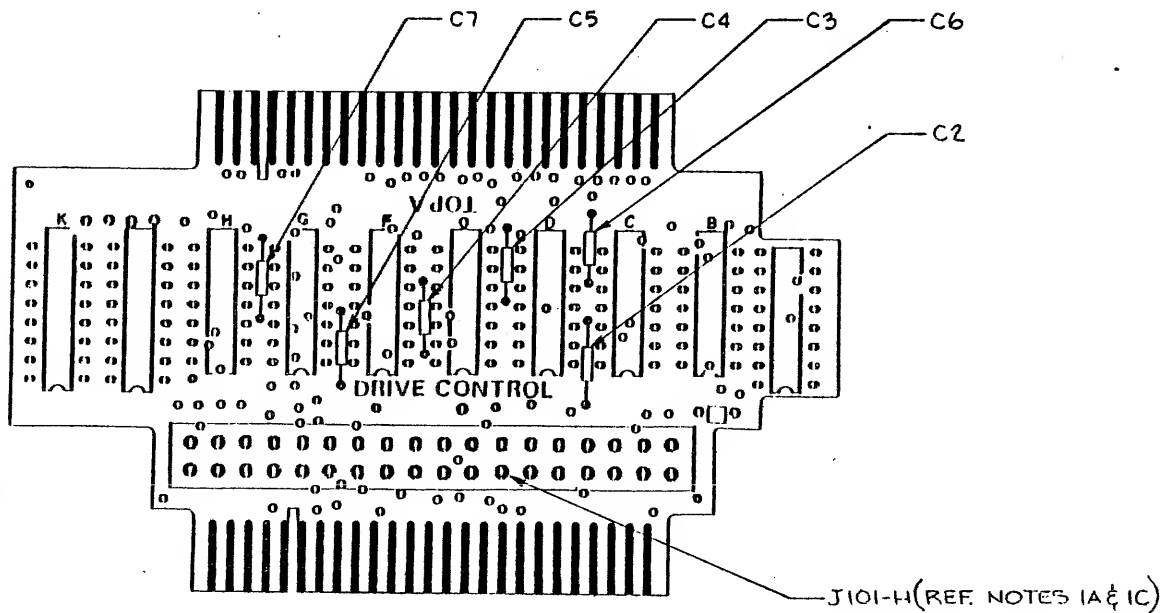
- ④ RUBBER STAMP ASSY. NO. WITH LATEST REV LTR APPROX. WHERE SHOWN.
 3. SEE P/L 122043.
 2. REF. SCHEMATIC DWG NO. 122022.
 ① RUBBER STAMP CHARACTERS SHOWN WITH WHITE INK.
 NOTE: UNLESS OTHERWISE SPECIFIED.

TOLERANCES UNLESS OTHERWISE SPECIFIED		western peripherals ANAHEIM, CALIFORNIA	
FRACTIONS	DEC.	ANGLES	
±	±	±	
APPROVALS	DATE	ASSEMBLY-ADAPTER, TAPE READ, REVERSE IMAGE, 90°	
DRAWN G.D.	6/7/77	SCALE 2X	SIZE B
CHECKED G.D.	6-11-77	DRAWING NO. 122043	
DO NOT SCALE DRAWING		SHEET 1 of 1	

CONFIGURATION "N" CONTROL ADAPTER BOARD



CAP DESIG.	FROM	TO	TERM
C2	D3	GND	RWS
C3	D11		BOT
C4	F1		OLS
C5	G1		EOT
C6	F9		HDS
C7	G13	GND	RDY





REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
A	REDRAWN PER E.C.O. 237	10-27-77	
B	REVISE PER E.C.O. 257	3-21-78	
C	REVISE PER E.C.O. 236-A	5-16-78	
D	DELETE REWORK FOR "D" REV FWB PER E.C.O. 781	10-15-80	<i>[Signature]</i>
E	CHANGED I.C. LOC. H" PER E.C.O. 806	12-23-80	<i>[Signature]</i>

REWORK INSTRUCTIONS: (REF ASSY'S 122037, 122038 & 122039)

- 1) MODIFY CIRCUIT
 - A. CUT ETCH(SOLDER SIDE) AT J101-H
 - B. JUMPER F5 TO E12 & I3(SOLDER SIDE)
 - C. JUMPER E11 TO J101-H(SOLDER SIDE)
- 2) COMPONENT ADDITION & MARKING
 - A. ADD (6) 220PF CAPACITORS(C2 THRU C7) AT LOCATIONS SHOWN
 - B. IDENTIFY AS "CONF N" AT ASSY NUMBER USING BLACK INK
- 3) THIS MOD PROVIDES ISOLATION & FILTERING FOR ADAPTER ELECTRONICS
- 4) MATERIAL REQUIREMENTS:
 - A. (1 REQ.) BOARD ASSY. AS NOTED IN PROCEDURES ABOVE
 - B. (6 REQ.) 220PF CAPACITORS (WP15000135)
- 5) VERIFY PROPER CAPACITOR INSTALLATION BY PERFORMING CONTINUITY CHECK PER THE CAPACITOR INSTALLATION CHART
- 6) REF. SCHEMATIC I22036
- 7) APPLICABLE TO "F"(OR LATER) REV PWB ONLY. TO RETROFIT OLDER ASSEMBLIES WITH "D" REV PWB, REFER TO "C" REV HISTORY COPY OF THIS DRAWING

DEC 24 1980

TOLERANCES UNLESS OTHERWISE SPECIFIED		 western peripherals ™ TUSTIN, CALIFORNIA	
FRACTIONS	DEC ANGLES		
±	±	MODIFICATION DWG- TAPE CONTROL ADAPTER CONFIGURATION "N"	
APPROVALS	DATE	SCALE 	SIZE B
DRAWN BY ANDERSSON	10-16-80		
CHECKED L.S. HARRIS	10-16-80		
		DRAWING NO. 122044	
		DO NOT SCALE DRAWING	
		SHEET 1 OF 1	

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	9-15-80	<i>[Signature]</i>


PURPOSE: TO PROVIDE START-UP AT 1600 B.P.I.

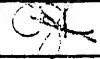
In order to initialize in the 1600 B.P.I. mode of operation, PROM's U45 and U56 in the upper-left corner of the Control Board must be of the proper type. A jumper must be installed.

1. The Prom Part Numbers can be 754013810 and 754013811 with revision levels of "G" or higher, or they may have part numbers beginning with 154 with any revision level.
2. A jumper must be installed between Pads "BP" and "BR" which are located below the PROMs and directly above U55.
3. After modification, install an adhesive label inside the front panel of the drive near the upper reel motor and Cipher label. The adhesive label should read: "Modified per Western Peripherals Configuration "A", Dwg. 79000410.

TAPE DRIVE MODIFICATION

SEP 15 1980


TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DEC. ANGLES ± ± ±		 western peripherals ™ TUSTIN, CALIFORNIA	
APPROVALS DRAWN H. DEUTSCH CHECKED <i>D. Shelly</i>		DATE 9-15-80 9-15-80	
MODIFICATION DRAWING - CIPHER 900X, CONFIGURATION "A"		SCALE	SIZE A
DRAWING NO. 79000410		DO NOT SCALE DRAWING	
SHEET		1 OF 1	

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	12-30-80	

PURPOSE: TO ELIMINATE WRITE AND/OR READ ERRORS WHEN TAPE IS AT B.O.T. AND DRIVE IS OFF-LINE.

When Cipher 900X Tape Drives are received from vendor, they have the jumpers set in such a way that if the drive is off-line and at B.O.T., the computer receives a tape unit ready status and Write/Read errors are detected if the CPU attempts any Write/Read operation.

1. To prevent the above from happening, remove jumper BD to BC and install jumper BA to BB located in the vicinity of IC U52 on the Control/Servo PCB of the Cipher 900X type drive.
2. After modification, install an adhesive label inside the front panel of the drive near the upper reel motor and Cipher label. The adhesive label should read: Modified per Western Peripherals Configuration "B", Dwg. 79000642.
3. Reference Cipher Control/Servo Schematic 355012-300.

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NOTES

INSTALLATION CHECKLIST - CIPHER 100X

1. Open carton.
2. Turn over and lift off carton.
3. Remove corner pads.
4. Open inner carton.
5. Turn over and lift off carton from drive.
6. Locate manual and mounting hardware.
7. Inspect the drive - Contact the carrier if any concealed shipping damage is discovered.
8. On some cabinets, a mounting frame is required to mount the drive because the door swings against the edge of the cabinet. Mount the extender frame at the appropriate location in the cabinet. Be sure the hinge holes are on the correct side.
9. Refer to the tape drive manual.
10. Mount the tape drive hinges at an appropriate location on the cabinet. Place the longer hinge at the top. Place nylon washers on hinge pins.
11. Place drive on its back and remove screw from shipping frame.
12. Mount drive on hinges and secure with hinge safety block. Secure drive latch.